

**PROJECT DESCRIPTION**

AT&T MOBILITY PROPOSES TO MODIFY AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY BY:

REMOVE (3) EXISTING 80010764 ANTENNAS  
REMOVE (3) EXISTING 7850 ANTENNAS  
REMOVE (3) EXISTING RRH2X60-1900A-4R RRHS  
REMOVE (8) EXISTING BALLAST MOUNTS  
REMOVE (4) EXISTING DC2 SURGE SUPPRESSORS  
INSTALL (3) NEW CMA-UBTMLBMLBHH-6516-16-21-21 ANTENNAS  
INSTALL (3) NEW 80010965 ANTENNAS  
INSTALL (3) NEW B5 - 4T4R AHCA -(25A BREAKER)-(RATE10)-(10/2 POWER JUMPERS)-(RF MINI JUMPER)  
INSTALL (3) NEW B25/B66 - 4T4R AHFIB - (50A BREAKER)-(RATE7)-(8/2 POWER JUMPERS)-(RF MINI JUMPER)  
INSTALL (1) NEW DC6 SQUID BOX FOR ALPHA/BETA SECTOR  
INSTALL (1) ELEVATED STEEL PLATFORM  
INSTALL (1) ANTENNA MOUNTING FRAME  
INSTALL (1) NEW ABIA CARD TO THE 4G SIDE OF FSM4  
INSTALL (1) NEW 5G UPGRADE KIT TO THE EXISTING FSM4. KIT CONTAINS ASIK AND ABIL CARDS.(25A) BREAKER REQUIRED WITH THIS INSTALL.  
INSTALL NEW EQUIPMENT H-FRAME AND UNISTRUT AS NEEDED

**REFERENCE NOTES**

GC SHALL REVIEW AND COMPLY WITH RFSSRP ANALYSIS  
COMPLETED BY: WATERFORD  
DATE: 12/02/2020  
PROJECT #: RF-20-0049

GC SHALL REVIEW AND COMPLY WITH MOUNT & ROOF PLATFORM STRUCTURAL ANALYSIS  
COMPLETED BY: MASTEC NETWORK SOLUTIONS  
DATE: 11/18/2020  
PROJECT #: 21545-MOD2

GC SHALL REVIEW AND COMPLY WITH ROOFTOP FRAME DESIGN DRAWINGS  
COMPLETED BY: MASTEC NETWORK SOLUTIONS  
DATE: 09/11/2020  
PROJECT #: 21545-MOD1

GC SHALL REVIEW AND COMPLY WITH RFDS  
REVISION: V3.00  
RFDS ID: 3592529  
DATE: 11/13/2020

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| T-1 TO A-1  | ROOFTOP FRAME DESIGN DRAWINGS | 0    | 09/11/20  |

**DIRECTIONS**

FROM I-405. TAKE EXIT 22. NE 160THST. TURN EAST. ON TO NE160TH ST. TRAVEL .7 MILES. TURN RIGHT OR SOUTH ON 124TH AVE NE. TRAVEL .7 MILES. TURN LEFT OR EAST ONTO NE 144TH ST. TURN RIGHT AT THE SECOND DRIVEWAY INTO A STRIP MALL PARKING LOT. TURN LEFT IN FRONT OF THE BUSINESSES. TURN RIGHT BEHIND THE BUILDING. SHELTER WILL BE ON THE RIGHT.

**CITY OF KIRKLAND  
REVIEWED BY TCHAN  
08/11/2021**

# LTE 4TXRX/4C/5G UPGRADE CONSTRUCTION DRAWINGS



at&t

City of Kirkland  
Reviewed by:  
Thomas Hoque, PCD

PTN:  
**3801A0T718**  
**3801A0T6ZF - PARENT**


PACE #:  
**MRWOR046536**  
**MRWOR046543 - PARENT**

FA #:  
**10092407**

SITE ID:  
**SB29**

SITE NAME:  
**KINGSGATE**

SITE ADDRESS:  
**14326 124TH AVENUE NORTHEAST  
KIRKLAND, WA 98034**

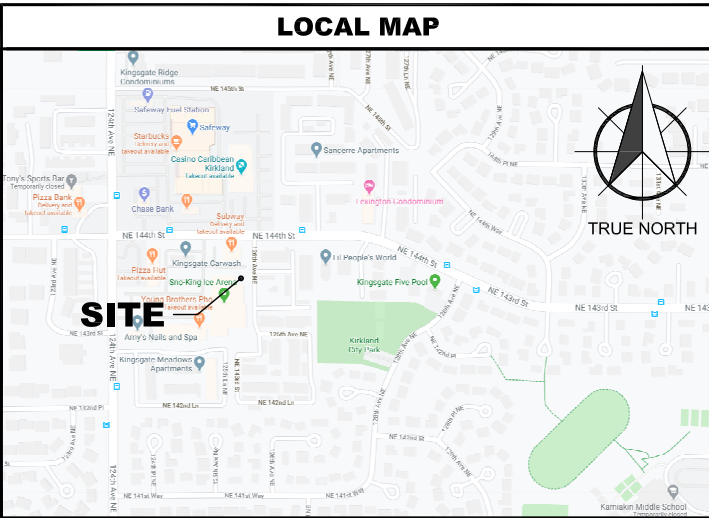


THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. THEREFORE HANDICAP ACCESS IS NOT REQUIRED. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED. PARKING REQUIREMENTS ARE UNCHANGED. TRAFFIC IS UNAFFECTED. SIGNAGE IS NOT PROPOSED.

**CODE COMPLIANCE**

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING:

|   |   |
|---|---|
| ZONING CLASSIFICATION: BC2 (COMMERCIAL) | OCCUPANCY: S-4, A-4                                 |
| BUILDING CODE: IBC 2018                 | JURISDICTION: CITY OF KIRKLAND                      |
| CONSTRUCTION TYPE: IV-B                 | PROPOSED STRUCTURE USE: TELECOMMUNICATIONS FACILITY |



**MUST REMAIN ON  
JOB SITE**

**SEPARATE PERMITS MAY  
BE REQUIRED FOR WORK  
RELATED TO:**

**-ELECTRICAL**

ALL Welding:  
Is required to be done by a WABO certified welder and have Special Inspections by a WABO certified Inspection Agency or Be done in a WABO certified fabrication shop.  
Have either the special inspection report or the WABO fabrication shop certification available on site for the Building Inspector.

| LEGAL DESCRIPTION  |                                  |
|--|----------------------------------|
| LOT:3 DIST:KIRKLAND SUBD:KINGSGATE SHOPPING PLAZA-BSP<br>SEC/TWN/RNG/MER:SEC 21 TWN 26 RNG 05 KINGSGATE SHOPPING PLAZA - BSP |                                  |
| SITE SUMMARY   |                                  |
| TOWER HEIGHT/TYPE:   | ±30'-0" / ROOFTOP                |
| SCOPE TYPE:  | CARRIER SWAP                     |
| OCCUPANCY TYPE:  | TELECOMMUNICATIONS               |
| LATITUDE:  | 47 ° 43' 50.30" N (47.73064°)    |
| LONGITUDE:   | 122 ° 10' 23.41" W (-122.17317°) |
| TOP OF STRUCTURE - AGL:  | ±30'-0"                          |
| BASE OF STRUCTURE - ASML:  | ±338.00'                         |
| PARCEL #:  | 3876460030                       |

| PROJECT DIRECTORY     |   |
|-----------------------|---|
| APPLICANT:            | NEW CINGULAR WIRELESS PCS, LLC (AT&T)<br>16221 NE 72ND WAY, RTC 3<br>P.O. BOX 97061<br>REDMOND, WA 98052                        |
| STRUCTURE OWNER:      | SNO-KING AMATEUR HOCKEY ASSOC.<br>14326 124TH AVE NE<br>KIRKLAND, WA 98034  |
| CONSTRUCTION MANAGER: | MASTEC NETWORK SOLUTIONS<br>CONTACT: MIKE SUTHERBY<br>PHONE: (231) 527-5269   |
| PROJECT MANAGER:      | MASTEC NETWORK SOLUTIONS<br>CONTACT: HANNAN RUTKOSKY<br>PHONE: (253) 985-5637   |
| SITE DESIGN:          | MASTEC NETWORK SOLUTIONS<br>507 AIRPORT BLVD, SUITE 111<br>MORRISVILLE, NC<br>CONTACT: RAPHAEL MOHAMED<br>PHONE: (919) 674-5895 |



RAPHAEL MOHAMED, P.E.  
WASHINGTON NO. 42214

07/28/21

| SUBMITTALS |              |     |           |
|------------|--------------|-----|-----------|
| DATE       | DESCRIPTION  | REV | ISSUED BY |
| 01/14/21   | CONSTRUCTION | 0   | AM        |
| 07/28/21   | JRX COMMENTS | 1   | AM        |
|            |              |     |           |
|            |              |     |           |
|            |              |     |           |

DRAWN BY: AJM  
CHECKED BY: AJM  
APPV'D BY: RM  
MNS PROJECT NO: 21545-AEC

THE INFORMATION CONTAINED IN THESE DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF MASTEC NETWORK SOLUTIONS IS PROHIBITED.

PREPARED FOR:



PREPARED BY:



507 AIRPORT BLVD, SUITE 111  
MORRISVILLE, NC 27560

SITE ID:  
**SB29**

SITE NAME:  
**KINGSGATE**

FA LOCATION:  
**10092407**

SITE ADDRESS:  
**14326 124TH AVENUE  
NORTHEAST  
KIRKLAND, WA 98034**

SHEET TITLE  
**TITLE SHEET**

SHEET NUMBER  
**T-1**

LIMITS OF LIABILITY:

MNS HAS MADE EVERY EFFORT TO CREATE COMPLETE AND ACCURATE CONTRACT DOCUMENTS WITH THE BEST INFORMATION AVAILABLE AT THE TIME OF THEIR COMPLETION. CONTRACTORS ARE CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE CONTRACT DOCUMENTS MAY OCCUR AND SHALL NOT EXCUSE THE CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THE DOCUMENTS. REFERENCE ADMINISTRATIVE REQUIREMENTS.

CONTRACT DOCUMENTS:

1. THE CONTRACT DOCUMENTS INCLUDE THE AGENCY APPROVED PROJECT SPECIFICATIONS, PLANS, AND THEIR LATEST REVISIONS, ADDENDA, AND CLARIFICATIONS. THE CONTRACT DOCUMENTS MAY ALSO INCLUDE NETWORK CARRIER STANDARDS FOR INSTALLATION OF TELECOMMUNICATIONS EQUIPMENT.
2. THE CONTRACTOR SHALL KEEP A MINIMUM OF ONE SET OF CONTRACT DOCUMENTS ON FILE IN THE PROJECT OFFICE AT THE JOB SITE. COPIES OF THE PROJECT DOCUMENTS USED BY SITE STAFF SHALL BE UP TO DATE WITH THE PROJECT OFFICE COPY.
3. THE CONTRACTOR SHALL NOTIFY THE PROJECT TEAM OF ANY ERRORS, OMISSIONS, AND INCONSISTENCIES FOUND IN THE CONTRACT DOCUMENTS. THE NOTIFICATION SHALL BE GIVEN BOTH VERBALLY AND IN WRITING WITHIN 24 HOURS OF DISCOVERY.
4. IF AN ERROR OR OMISSION IN THE PROJECT DOCUMENTS REQUIRES RECTIFICATION, THE CONTRACTOR SHALL SUBMIT A PROPOSAL TO THE PROJECT TEAM TO RECTIFY THE ISSUE. THE PROPOSAL MUST BE APPROVED PRIOR TO WORK.
5. THE CONTRACT DRAWINGS ARE PREPARED TO SCALE WITH THE BEST KNOWLEDGE OF THE SITE GIVEN TO MNS. WHERE DIMENSIONS ARE NOT SHOWN IN THE DRAWINGS, THE CONTRACTOR SHOULD CLARIFY WITH THE PROJECT TEAM WHEN THE INFORMATION IS CRITICAL TO PROPER INSTALLATION.
6. THE CONTRACTOR SHALL DOCUMENT ALL CHANGES AND SUBSTITUTIONS ON THE PROJECT OFFICE COPY OF THE CONTRACT DOCUMENTS.
7. WHEN FABRICATION OF STRUCTURAL ITEMS ARE REQUIRED, IT MAY BE NECESSARY TO SUBMIT SHOP DRAWINGS FOR REVIEW BY MNS. SEE STRUCTURAL NOTES.
8. DEFERRED SUBMITTALS ARE REQUIRED FOR MATERIALS TO BE PROVIDED BY THE CONTRACTOR. WHERE MATERIALS IN THE PLANS ARE DESIGNATED AS PROVIDED BY CONTRACTOR, THE CONTRACTOR SHALL SUBMIT THE PREFERRED MATERIAL TO THE PROJECT TEAM FOR REVIEW AND APPROVAL PRIOR TO WORK.

ADMINISTRATIVE REQUIREMENTS:

1. ALL ACCESS TO THE SITE, FOR SITE VISITS AND CONSTRUCTION, SHALL BE DURING 7:00-3:30 AND MUST BE COORDINATED WITH THE PROPERTY OWNER.
2. AT THE COMPLETION OF THE PROJECT, THE AT&T PROPERTY MANAGER AND THE DISTRICT WILL DO A FINAL WALK THROUGH AND APPROVE ALL WORK PRIOR TO ACCEPTANCE.
3. THE PROPERTY OWNER WILL RECEIVE ONSET OF FULL SIZE AND 11X17 ASBULTS AT THE COMPLETION OF THE PROJECT.
4. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED (INCLUDING FEES) TO COMPLETE THE WORK DESCRIBED BY THE CONSTRUCTION DOCUMENTS.
5. PRIOR TO BIDDING, THE CONTRACTOR IS RESPONSIBLE FOR REVIEW OF THE PROJECT SITE AND CONTRACT DOCUMENTS TO UNDERSTAND THE DESIGN AND CONDITIONS AFFECTING THE WORK TO BE PERFORMED. ANY ERRORS, OMISSIONS, AND DISCREPANCIES MUST BE SUBMITTED TO THE PROJECT TEAM VERBALLY AND IN WRITING.
6. THE CONTRACTOR SHALL PROVIDE A WARRANTY FOR WORK FOR A PERIOD OF ONE YEAR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REMEDY ALL FAULTY, INFERIOR, AND/OR IMPROPER MATERIALS, DAMAGED GOODS, AND/OR FAULTY WORKMANSHIP. ALL ROOFING AND WATERPROOFING MUST BE WARRANTED FOR A PERIOD OF TWO YEARS. THE PERIOD BEGINS AT SUBSTANTIAL COMPLETION OF THE PROJECT.
7. THE CONTRACTOR SHALL PROVIDE A COPY OF LICENSE AND INSURANCE TO THE TELECOMMUNICATIONS CARRIER.

SITE SAFETY:

1. THE CONTRACTOR SHALL PROVIDE OSHA COMPLIANT PROTECTION FOR THE SAFETY OF THE SITE STAFF AT ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT.
2. CONTRACTOR SHALL KEEP GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION. SITE SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM DIRT AND DEBRIS. SURFACES SHALL BE CLEANED OF GREASE, PAINT, OR OTHER MATERIALS NOT SPECIFIED IN THE CONSTRUCTION DOCUMENTS.
3. THE CONTRACTOR IS TO PROVIDE PROTECTION FOR ADJOINING PROPERTIES FROM PHYSICAL HARM, NOISE, DUST, DIRT, AND FIRE AS REQUIRED BY THE GOVERNING AGENCIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR OF ANY DAMAGE.

4. THE CONTRACTOR IS RESPONSIBLE FOR THE SECURITY OF THE PROJECT SITE AREA.
5. WHERE WORK REQUIRES OPEN HAZARDS TO SITE STAFF, THE HAZARD SHALL BE TEMPORARILY MITIGATED TO OSHA STANDARD UNTIL THE HAZARD IS CLOSED.
6. SEE STRUCTURAL NOTES.

UTILITY REQUIREMENTS:

1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH UTILITY AGENCIES PRIOR TO WORK WITH UTILITIES.
2. CONTRACTOR TO LOCATE ALL UTILITIES PRIOR TO WORK.
3. CONTRACTOR TO PROTECT, REPLACE AND/OR REROUTE ANY EXISTING UTILITIES ENCOUNTERED DURING THE COURSE OF WORK.

SPECIAL CONSIDERATIONS FOR WEATHERPROOFING:

1. ALL PENETRATIONS TO EXISTING STRUCTURES MUST BE SEALED WITH APPROVED WEATHERPROOFING. IF WEATHERPROOFING IS OMITTED, CONTACT THE PROJECT TEAM FOR CLARIFICATION OR PROVIDE A WEATHERPROOFING PROPOSAL FOR APPROVAL.
2. CONTRACTOR SHALL COORDINATE WITH OWNER AND THE EXISTING ROOFING CONTRACTOR OF RECORD FOR ANY AUGMENTATION TO THE ROOF MEMBRANE, AND HAVING THE WORK GUARANTEED UNDER THE ROOFING CONTRACTOR'S EXISTING WARRANTY.

WORK REQUIREMENTS:

1. ALL WORK MUST BE PERFORMED DURING THE OWNERS PREFERRED HOURS.
2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
3. ALL WORK PERFORMED ON THE PROJECT SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS. SEE STRUCTURAL NOTES.
4. IF INSPECTION OF WORK IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE INSPECTION ENTITY 24 HOURS IN ADVANCE OF THE WORK TO BE PERFORMED.
5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH UTILITY AGENCIES PRIOR TO WORK WITH UTILITIES. REFERENCE UTILITIES SECTION.
6. THE CONTRACTOR SHALL COORDINATE ON-SITE STORAGE WITH OWNER IN ADVANCE OF WORK. PERMITS MAY BE REQUIRED FOR STORAGE ON PUBLIC RIGHT OF WAY.
7. ALL NEW CONSTRUCTION SHALL MATCH EXISTING CONSTRUCTION IN FORM, TEXTURE, FINISH, AND IN MATERIALS EXCEPT AS NOTED IN THE CONSTRUCTION DOCUMENTS.
8. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT EXISTING WORK FROM DAMAGE DURING THE COURSE OF WORK FOR THIS PROJECT.
9. THE CONTRACTOR SHALL PROVIDE WORK WHICH IS LEVEL, PLUMB, AND WITHIN TOLERANCES SPECIFIED BY CODES AND STANDARDS INCLUDED IN THE STRUCTURAL NOTES.
10. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
11. ANY SUBSTITUTIONS OF MATERIALS MUST BE APPROVED BY THE PROJECT TEAM IN WRITING.
12. THE CONTRACTOR SHALL SUPPLY ALL MATERIALS INCIDENTAL TO THE WORK DESCRIBED BY THE CONTRACT DOCUMENTS.
13. THE CONTRACTOR MUST RESTORE ALL PORTIONS OF THE PROJECT SITE TO IT'S PRE-WORK CONDITION. WHERE THE WORK PERFORMED DOES NOT ALLOW FOR PRE-WORK RESTORATION, WORK AREAS MUST BE REPAIRED OR REPLACED TO MATCH EXISTING FINISH AND SITE GRADING.
14. THE CONTRACTOR IS RESPONSIBLE FOR ALL DISPOSAL OF DEBRIS AND ITEMS WHICH ARE SPECIFIED TO BE REMOVED IN THE COURSE OF WORK.

CAST-IN PLACE CONCRETE:

1. ALL CONCRETE DESIGN DESCRIBED BY THIS SET OF DRAWINGS IS BASED ON ACI 318.
2. ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI, UNLESS SPECIFIED OTHERWISE.
3. EACH CONCRETE MIX DESIGN SHALL HAVE A CYLINDER TEST HISTORY OF 60 DAYS MINIMUM, TESTED IN ACCORDANCE WITH ASTM C39, TESTED BY AN ACI CERTIFIED STRENGTH TESTING TECHNICIAN, AND THE STRENGTH STATISTICALLY DETERMINED IN ACCORDANCE WITH ACI 318. EACH MIX DESIGN USED ON SITE SHALL BE SUBMITTED TO, AND RECEIVED BY THE PROJECT TEAM BEFORE THE CONCRETE IS PLACED ON SITE.
4. RAW MATERIALS, MANUFACTURE, AND DELIVERY TO THE FORMWORK SHALL BE IN ACCORDANCE WITH ASTM C94 AND ACI 318.
5. EMBEDDED ITEMS ARE TO BE SECURELY FASTENED SO THAT THEY DO NOT MOVE DURING PLACEMENT OF THE CONCRETE.

REFERENCE THE REINFORCING STEEL SECTION.

6. TWO CYLINDERS SHALL BE TAKEN FOR EACH LOAD DELIVERED TO THE FORMWORK. SAMPLES ARE TO BE TAKEN FROM THE CONCRETE AS IT IS PLACED IN THE FORMWORK IN ACCORDANCE WITH ASTM C172. CYLINDERS ARE TESTED PER ASTM C39 AND TESTED BY AN ACI CERTIFIED CSTT. CONCRETE SAMPLES ARE TO BE TESTED FOR AIR CONTENT AND WATER CEMENT RATIO. ALL TEST RESULTS ARE SUBMITTED TO THE PROJECT TEAM WITHIN ONE MONTH OF PLACING THE CONCRETE ON SITE.
7. WHEN AMBIENT TEMPERATURES FALL BELOW 55 DEGREES FAHRENHEIT, THE CONTRACTOR SHALL FOLLOW GUIDELINES DESCRIBED IN ACI 308. WHEN AMBIENT TEMPERATURES RISE ABOVE 90 DEGREES FAHRENHEIT, THE CONTRACTOR SHALL FOLLOW GUIDELINES DESCRIBED IN ACI 305. THE CONCRETE SHALL BE PROTECTED FROM FREEZING OR FROM EXCESSIVE HEAT WITH TEXTS OR BLANKETS TO PROVIDE FOR HEAT OR MOISTURE LOSS.
8. ALL CONCRETE SHALL BE PLACED AS CLOSE TO PRACTICAL TO THE FINAL DESTINATION IN THE FORM. CONCRETE SHALL NOT BE PLACE FROM A HEIGHT GREATER THAN 6 FEET FROM THE POINT OF DISCHARGE.
9. VIBRATION SHALL BE USED TO CONSOLIDATE CONVENTIONAL CONCRETE. EXTERNAL STINGER VIBRATORS SHALL BE INSERTED VERTICALLY INTO FORMS EVERY 36 INCHES MAXIMUM AND FOR EACH LIFT. STINGER VIBRATORS SHALL BE INSERTED TO A VERTICAL DEPTH OF 12 INCHES INTO PREVIOUS LIFTS TO ENSURE CONSOLIDATION. FOLLOW GUIDELINES USED IN ACI 309R.
10. REPAIRS FOR MINOR DEFECTS MAY BE ADMINISTERED BY AN EXPERIENCED CRAFTSMAN WITHOUT AN APPROVED PROCEDURE. A MINOR DEFECT INCLUDES BUG HOLES, HONEYCOMBING, CHIPS, AND SPALLS THAT DO NOT EXCEED ½ INCH OF DEPTH INTO THE FACE OF THE CONCRETE. MAJOR REPAIRS EXTENDING BEYOND ½ INCH OF DEPTH AND UP TO THE REINFORCING MAY BE REPAIRED WITH AN APPROVED REPAIR PROCEDURE. REPAIR PROCEDURES MAY BE SUBMITTED TO THE PROJECT TEAM FOR APPROVAL IN ADVANCE OF FIELD WORK. DAMAGE EXTENDING BEYOND STEEL REINFORCING REQUIRES A RETROFIT DESIGN OR IS REJECTED.
11. SEE ARCHITECTURAL NOTES FOR CONCRETE FINISH REQUIREMENTS

EXISTING STRUCTURES:

1. THE EXISTING FRAMING IS REPRODUCED FROM THE LATEST INFORMATION PROVIDED. SOME FRAMING AND MATERIALS ENCOUNTERED AT THE TIME OF CONSTRUCTION MAY VARY FROM THAT SHOWN IN THE PLANS. IF THE PLAN CONDITION VARIES FROM THE AS-BUILT CONDITION, THE CONTRACTOR SHOULD CONSULT THE PROJECT TEAM FOR A REVISED DETAIL OR DIRECTION TO PROCEED.

CONCRETE SLABS ON GRADE:

1. SLAB-ON-GRADE CONSTRUCTION SHALL BE SUPPORTED ON A 6 INCH LAYER OF CLEAN 3/4 INCH MINUS SUBGRADE COMPACTED TO A DENSITY OF NO LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557). SUBGRADE SHALL BE SUPPORTED ON UNDISTURBED NATIVE SOIL OR PROPERLY PLACED AND COMPACTED STRUCTURAL FILL.
2. INTERIOR SLABS-ON-GRADE SHALL BE CAST OVER A 4 MIL VAPOR BARRIER.
3. PROVIDE CONTROL JOINTS IN ALL SLABS ON GRADE. JOINTS ARE TO BE INSTALLED AT 14 TO 16 FEET ON CENTER EACH WAY MAXIMUM UNLESS SHOWN OTHERWISE ON THE DRAWINGS. ALL SAW CUT JOINTS IN CONCRETE SLABS ARE TO BE MADE WITH AN EARLY CUT SAW AS SOON AS POSSIBLE AFTER POURING BUT NO LATER THAN ONE HOUR AFTER FINISHING.
4. PROVIDE ISOLATION JOINTS AROUND ALL COLUMNS/SPREAD FOOTINGS. JOINTS SHALL BE FORMED BY INSERTING PREFORMED JOINT FILLER FOR THE FULL DEPTH OF THE SLAB.
5. PROTECT CONCRETE FROM DAMAGE OR REDUCED STRENGTH DUE TO COLD OR HOT WEATHER IN ACCORDANCE WITH ACI 305 AND 306. CONTRACTOR SHALL TAKE SPECIAL CURING PRECAUTIONS TO MINIMIZE SHRINKAGE CRACKING OF CONCRETE SLABS.
6. THE CONTRACTOR SHALL TAKE CARE THAT HEAVY EQUIPMENT AND AREAS USED FOR STAGING DO NOT AND DAMAGE SLABS ON GRADE. DAMAGED SLABS ON SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.
7. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,500 PSI. UNLESS SPECIFIED OTHERWISE.

CONCRETE OR MASONRY ANCHORAGE:

1. EXPANSION BOLTS INTO CONCRETE SHALL BE "Kwik BOLT TZ" AS MANUFACTURED BY THE HILTI CORP., INSTALLED IN STRICT ACCORDANCE WITH ICC-ES REPORT ESR-1917. SPECIAL INSPECTION IS REQUIRED. EXPANSION ANCHORS EXPOSED TO WEATHER SHALL BE STAINLESS STEEL.

REINFORCING STEEL:

1. ALL DETAILING, FABRICATION, AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE ACI MANUAL OF CONCRETE PRACTICE.
2. REINFORCING BARS SHALL BE DEFORMED AND CONFORM TO ASTM A615 OR A706, GRADE 60. REINFORCING TIE WIRE MAY BE GRADE 40.
3. REINFORCING STEEL SPLICES SHALL BE 40 BAR DIAMETERS OR

4. TWO TRANSVERSE WIRE SPACINGS FOR WIRE MATS. MINIMUM CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE IN ACCORDANCE WITH ACI 318.
5. NO.5 OR LARGER REINFORCING BARS SHALL NOT BE RE-BENT WITHOUT APPROVAL BY THE STRUCTURAL ENGINEER.
6. WELDING OF REBAR IS NOT ALLOWED WITHIN THE MIDDLE THIRD OF THE BAR LENGTH. WELDING OF REBAR IS CONDUCTED IN ACCORDANCE WITH AWS D1.4. USE ONLY ASTM A706 REINFORCING.
7. WIRE REINFORCING CONFORMS TO ASTM A82 OR A185.
8. CONCRETE COVER FOR REINFORCING STEEL CONFORMS TO ACI 318.

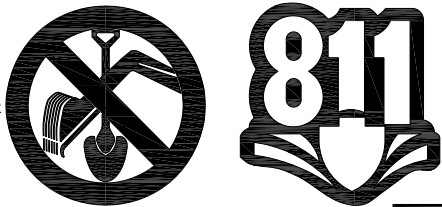
ABBREVIATIONS:

- A/C AIR CONDITIONING
- AGL ABOVE GROUND LEVEL
- AMSL ABOVE MEAN SEA LEVEL
- APPROX APPROXIMATELY
- AWG AMERICAN WIRE GAGE
- BCW BARE COPPER WIRE
- BLK BUILDING
- CLR BLOCKING
- COAX CLEAR
- CONC COAXIAL CABLE
- CONST CONCRETE
- CONT CONSTRUCTION
- DIA CONTINUOUS
- DWG DIAMETER
- EA DRAWING
- ELEV EACH
- ELEC ELEVATION
- EQ ELECTRICAL
- EQUIP EQUAL
- EXT EQUIPMENT
- FIN EXTERIOR
- FLUOR FINISH
- FLR FLUORESCENT
- FT FLOOR
- FRP FOOT
- GA FIBER-REINFORCED POLYMER
- GALV GAUGE
- GC GALVANIZED
- GPS GENERAL CONTRACTOR
- GRND GLOBAL POSITIONING SYSTEM
- HORZ GROUND
- HR HORIZONTAL
- HT HOUR
- HVAC HEIGHT
- ID HEATING VENTILATION AIR
- IN CONDITIONING
- INFO INSIDE DIAMETER
- INSUL INCH
- INT INFORMATION
- IBC INSULATION
- LBS INTERIOR
- LMU INTERNATIONAL BUILDING CODE
- LTE POUNDS
- MAX LOCATION MEASUREMENT UNIT
- MECH LONG TERM EVOLUTION
- MTL MAXIMUM
- MFR MECHANICAL
- MGR METAL
- MIN MANUFACTURE
- MISC MANAGER
- NA MINIMUM
- NIC MISCELLANEOUS
- NTS NOT APPLICABLE
- OC NOT IN CONTRACT
- OD NOT TO SCALE
- PLYWD ON CENTER
- PROJ OUTSIDE DIAMETER
- PROP PLYWOOD
- PT PROJECT
- REQ PROPERTY
- RF PRESSURE TREATED
- RM REQUIRED
- RO RADIO FREQUENCY
- RRH ROOM
- RRU ROUGH OPENING
- SHT REMOTE RADIO HEAD
- SIM REMOTE RADIO UNIT
- SPEC SHEET
- SF SIMILAR
- SS SPECIFICATION
- STL SQUARE FOOT
- STRUCT STAINLESS STEEL
- STD STEEL
- SUSP STRUCTURAL
- TMA STANDARD
- TNNG SUSPENDED
- TYP THROUGH
- UNO TOWER MOUNTED AMPLIFIER
- VIF TINNED
- VW/ UNLESS NOTED OTHERWISE
- W/O VERTICAL
- WP WITHOUT
- WATER WATER PROOF

- LEGEND:
- SUBJECT BOUNDARY LINE
- RIGHT-OF-WAY CENTERLINE
- RIGHT-OF-WAY LINE
- ADJACENT BOUNDARY LINE
- SECTIONAL BREAKDOWN LINE
- COAX CABLE LINE
- FIBER OPTIC CABLE LINE
- OVERHEAD POWER LINE
- BURIED POWER LINE
- BURIED GAS LINE
- OVERHEAD TELEPHONE LINE
- BURIED TELEPHONE LINE
- BURIED WATER LINE
- BURIED SANITARY SEWER
- BURIED STORM DRAIN
- DITCH LINE/FLOW LINE
- VEGETATION LINE
- CHAIN LINK FENCE
- WOOD FENCE
- BARBED WIRE/WIRE FENCE

- TRANSFORMER
- LIGHT STANDARD
- POWER VAULT
- UTILITY BOX
- UTILITY POLE
- POLE GUY WIRE
- GAS VALVE
- GAS METER
- TELEPHONE VAULT
- TELEPHONE RISER
- GRID REFERENCE
- ELEVATION REFERENCE
- REVISION
- FIRE HYDRANT
- GATE VALVE
- WATER METER
- FIRE STAND PIPE
- CATCH BASIN, TYPE I
- CATCH BASIN, TYPE II
- SIGN
- BOLLARD
- MAIL BOX
- SPOT ELEVATION
- DETAIL REFERENCE
- SECTION REFERENCE

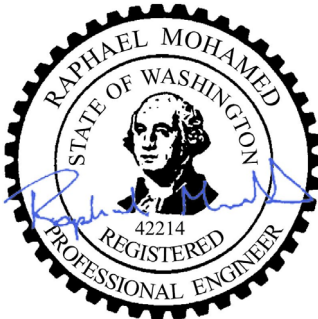
CITY OF KIRKLAND  
REVIEWED BY TCHAN  
08/11/2021



DIG ALERT

Know what's below.  
CALL before you dig.

CALL AT LEAST TWO WORKING  
DAYS BEFORE YOU DIG



RAPHAEL MOHAMED, P.E. 07/28/21  
WASHINGTON NO. 42214

| SUBMITTALS |              |     |                     |
|------------|--------------|-----|---------------------|
| DATE       | DESCRIPTION  | REV | ISSUED BY           |
| 01/14/21   | CONSTRUCTION | 0   | AM                  |
| 07/28/21   | JRX COMMENTS | 1   | AM <span>△</span> 1 |
|            |              |     |                     |
|            |              |     |                     |
|            |              |     |                     |

DRAWN BY: AJM  
CHECKED BY: AJM  
APPV'D BY: RM  
MNS PROJECT NO: 21545-AEC

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PREPARED FOR:



PREPARED BY:

MasTec  
Network Solutions  
507 AIRPORT BLVD, SUITE 111  
MORRISVILLE, NC 27560

SITE ID:

SB29

SITE NAME:

KINGSGATE

FA LOCATION:

10092407

SITE ADDRESS:

14326 124TH AVENUE  
NORTHEAST  
KIRKLAND, WA 98034

SHEET TITLE

GENERAL NOTES

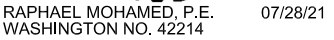
SHEET NUMBER

GN-1



**LOT AREA SF:** ±90,636 SF





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SITE ID:

**SB29**

SITE NAME:

# KINGSGATE

FA LOCATION:

**10092407**

**SITE ADDRESS:**

**14326 124TH AVENUE  
NORTHEAST  
KIRKLAND, WA 98034**

SHEET TITLE

## EXISTING SITE LAYOUT


SHEET NUMBER

**A-2**





RAPHAEL MOHAMED, P.E. 07/28/21  
WASHINGTON NO. 42214

| <b>SUBMITTALS</b> |              |     |  |
|-------------------|--------------|-----|--|
| DATE              | DESCRIPTION  | REV | ISSUED BY  |
| 01/14/21          | CONSTRUCTION | 0   | AM   |
| 07/28/21          | JRX COMMENTS | 1   | AM  |
|                   |              |     |  |
|                   |              |     |  |
|                   |              |     |  |

|                 |           |
|-----------------|-----------|
| DRAWN BY:       | AJM       |
| CHECKED BY:     | AJM       |
| APPV'D BY:      | RM        |
| MNS PROJECT NO: | 21545-AEC |

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PREPARED FOR:



PREPARED BY:



SITE ID:

**SB29**

SITE NAME:

# KINGSGATE

FA LOCATION:

**10092407**

SITE ADDRESS:

**14326 124TH AVENUE  
NORTHEAST  
KIRKLAND, WA 98034**

SHEET TITLE

## FINAL SITE LAYOUT

SHEET NUMBER

## A-2.1

**RF SIGNAGE NOTES:**

**AT&T MOBILITY, LLC PROPOSED ALPHA SECTOR LOCATION**

- (1) CAUTION 2 SIGN(S) REQUIRED ON THE FRONT OF ALPHA SECTOR
- (1) CAUTION 2 SIGN(S) REQUIRED ON THE BACK OF ALPHA SECTOR
- (1) CAUTION 2 SIGN(S) REQUIRED ON THE SIDE OF BETA SECTOR
- (4) CAUTION 2 SIGN(S) REQUIRED ON THE UPPER EAST WALL
- (6) CAUTION 2 SIGN(S) REQUIRED ON 36' BARRIER SEGMENT AT ALPHA SECTOR

(13) TOTAL CAUTION 2 SIGN(S) AT ALPHA SECTOR

**AT&T MOBILITY, LLC PROPOSED BETA SECTOR LOCATION**

- (2) CAUTION 2 SIGN(S) REQUIRED ON THE FRONT OF BETA SECTOR
- (4) CAUTION 2 SIGN(S) REQUIRED ON 40' BARRIER SEGMENT AT BETA SECTOR
- (3) CAUTION 2 SIGN(S) REQUIRED ON 14' BARRIER SEGMENT AT BETA SECTOR
- (3) CAUTION 2 SIGN(S) REQUIRED ON 16' BARRIER SEGMENT AT BETA SECTOR

(12) TOTAL CAUTION 2 SIGN(S) AT BETA SECTOR

**AT&T MOBILITY, LLC PROPOSED GAMMA SECTOR LOCATION**

- (1) CAUTION 2 SIGN(S) REQUIRED ON THE FRONT OF SECTOR BELOW THE ANTENNAS ON THE UPPER NORTH WALL AT GAMMA SECTOR
- (2) CAUTION 2C SIGN(S) REQUIRED ON THE BACK OF THE PARAPET AT GAMMA SECTOR

(3) TOTAL CAUTION 2 SIGN(S) AT BETA SECTOR

**NOTE(S):**

1. BARRIERS MUST BE BUILT A MINIMUM OF 6 FEET AWAY FROM UNPROTECTED ROOF EDGE. MINIMUM OF 36" OF PARAPET WALL.
2. 6' MINIMUM DISTANCE REQUIRED FOR STANCHION POSTS.
3. INSTALL RF SIGNAGE PER SITE SCALE MAP REFERENCED IN RFSSRP.
4. SIGNAGE INFORMATION OBTAINED FROM WATERFORD RF COMPLIANCE EXPERTS DATED 12/02/20.

2  
A-6.1

**PROPOSED (2) CAUTION 2C SIGN(S) POSTED ON BACK OF PARAPET AT GAMMA SECTOR**

2  
A-6.1

**PROPOSED (1) CAUTION 2 SIGN(S) POSTED ON SIDE OF ARRAY AT ALPHA SECTOR**

1/2  
A-6.1

**PROPOSED 16'-0" BARRIER SEGMENT WITH (3) CAUTION 2 SIGN(S) POSTED ON STANCHION POST AT BETA SECTOR**

2  
A-6.1

**PROPOSED (2) CAUTION 2 SIGN(S) POSTED IN FRONT OF ARRAY AT BETA SECTOR**

2  
A-6.1

**PROPOSED (2) CAUTION 2 SIGN(S) POSTED IN FRONT OF ARRAY AT ALPHA SECTOR**

**PROPOSED (1) CAUTION 2 SIGN(S) POSTED AT FRONT OF GAMMA SECTOR BELOW ANTENNAS**

EXISTING AND PROPOSED AT&T ANTENNAS MOUNTED TO FACE OF EXISTING BUILDING

PROPOSED AT&T RAISED PLATFORM AND SECTOR FRAME AND LOCATION OF PROPOSED ANTENNA AND EQUIPMENT

**CITY OF KIRKLAND  
REVIEWED BY TCHAN  
08/11/2021**

EXISTING CABLE TRAY

EXISTING CHAIN-LINK FENCE ENCLOSURE AT GROUND

EXISTING AT&T EQUIPMENT SHELTER LOCATED AT GROUND.

EXISTING VERTICAL CABLE TRAY

**PROPOSED 36'-0" BARRIER SEGMENT WITH (6) CAUTION 2 SIGN(S) POSTED ON STANCHION POST AT ALPHA SECTOR**

**(4) CAUTION 2 SIGN(S) REQUIRED ON THE UPPER EAST WALL AT ALPHA SECTOR**

**PROPOSED 40'-0" BARRIER SEGMENT WITH (4) CAUTION 2 SIGN(S) POSTED ON STANCHION POST AT BETA SECTOR**

**PROPOSED 14'-0" BARRIER SEGMENT WITH (3) CAUTION 2 SIGN(S) POSTED ON STANCHION POST AT BETA SECTOR**

EXISTING ROOF ACCESS HATCH

EXISTING OTHER CARRIER EQUIPMENT COMPOUND ON ROOF

EXISTING OTHER CARRIER EQUIPMENT COMPOUND AT GROUND

EXISTING OTHER CARRIER MONOPOLE

EXISTING MID-LEVEL ROOF

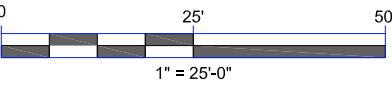
EXISTING UPPER ROOF

EXISTING MID-LEVEL ROOF

EXISTING LOWER ROOF

1  
A-3

**FINAL SITE LAYOUT**  
11"x17" SCALE: 1" = 25'-0"



RAPHAEL MOHAMED, P.E.  
WASHINGTON NO. 42214 07/28/21

**SUBMITTALS**

| DATE     | DESCRIPTION  | REV | ISSUED BY |
|----------|--------------|-----|-----------|
| 01/14/21 | CONSTRUCTION | 0   | AM        |
| 07/28/21 | JRX COMMENTS | 1   | AM        |
|          |              |     |           |
|          |              |     |           |
|          |              |     |           |

DRAWN BY: AJM  
CHECKED BY: AJM  
APPV'D BY: RM  
MNS PROJECT NO: 21545-AEC

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PREPARED FOR:



PREPARED BY:

**MasTec**  
Network Solutions  
507 AIRPORT BLVD, SUITE 111  
MORRISVILLE, NC 27560

SITE ID:

**SB29**

SITE NAME:

**KINGSGATE**

FA LOCATION:

**10092407**

SITE ADDRESS:

**14326 124TH AVENUE  
NORTHEAST  
KIRKLAND, WA 98034**

SHEET TITLE

**FINAL SITE LAYOUT**

SHEET NUMBER

**A-3**



NOTES:

1. VERIFY LOCATION OF PROPOSED EQUIPMENT WITHIN EXISTING CABINET(S).
2. ALL EXISTING EQUIPMENT TO REMAIN IN EXISTING AT&T EQUIPMENT SHELTER, UNLESS OTHERWISE SCOPED.

CITY OF KIRKLAND  
REVIEWED BY TCHAN  
08/11/2021



RAPHAEL MOHAMED, P.E.  
WASHINGTON NO. 42214  
07/28/21

SUBMITTALS

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|          |              |     |           |
|          |              |     |           |
|          |              |     |           |

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CHECKED BY: AJM  
APP'D BY: RM  
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PREPARED BY:



SITE ID:

SB29

SITE NAME:

KINGSGATE

FA LOCATION:

10092407

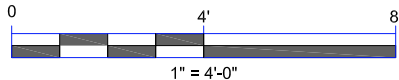
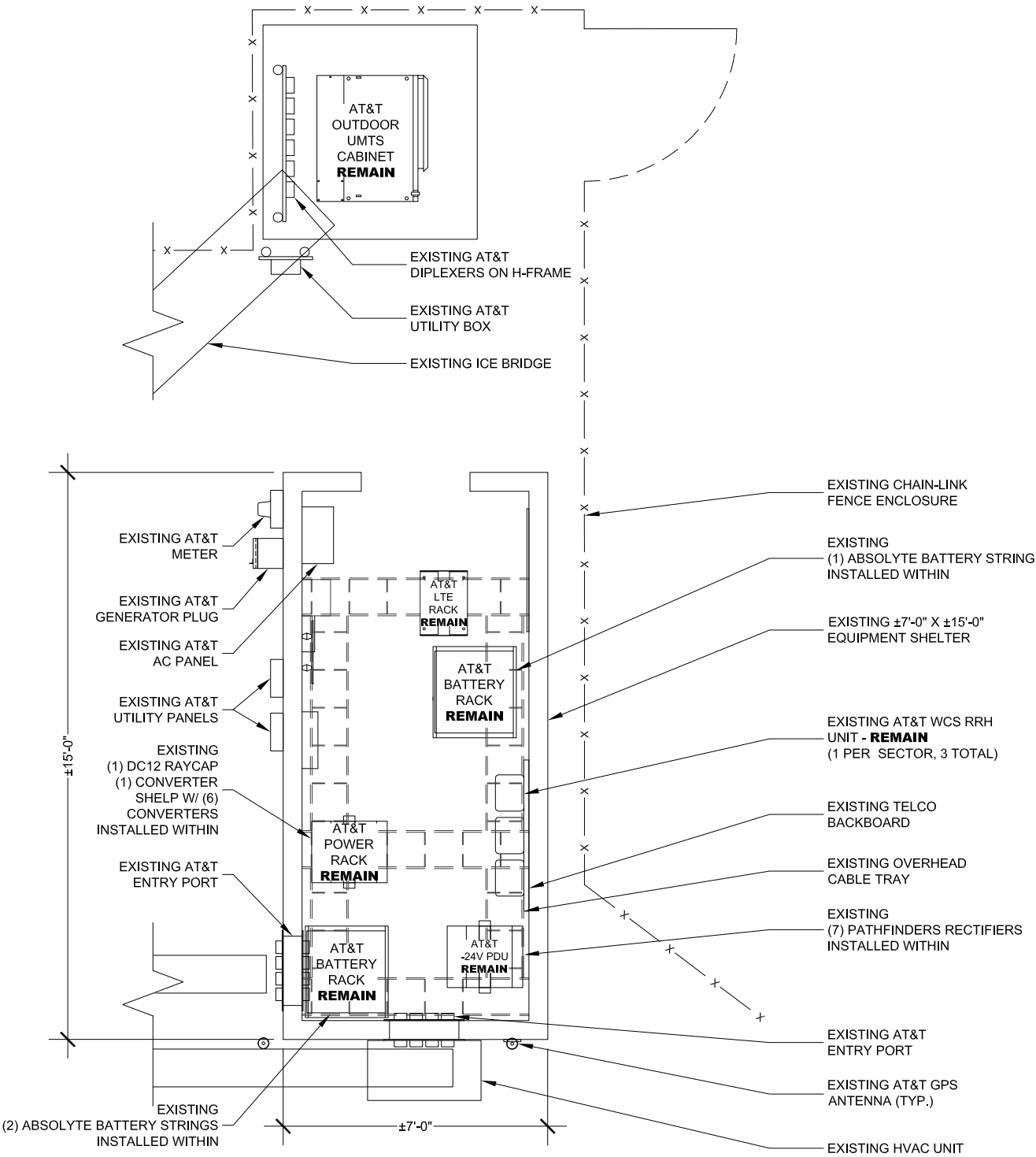
SITE ADDRESS:

14326 124TH AVENUE  
NORTHEAST  
KIRKLAND, WA 98034

SHEET TITLE  
EQUIPMENT LAYOUT

SHEET NUMBER

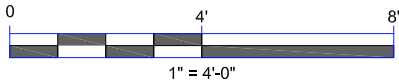
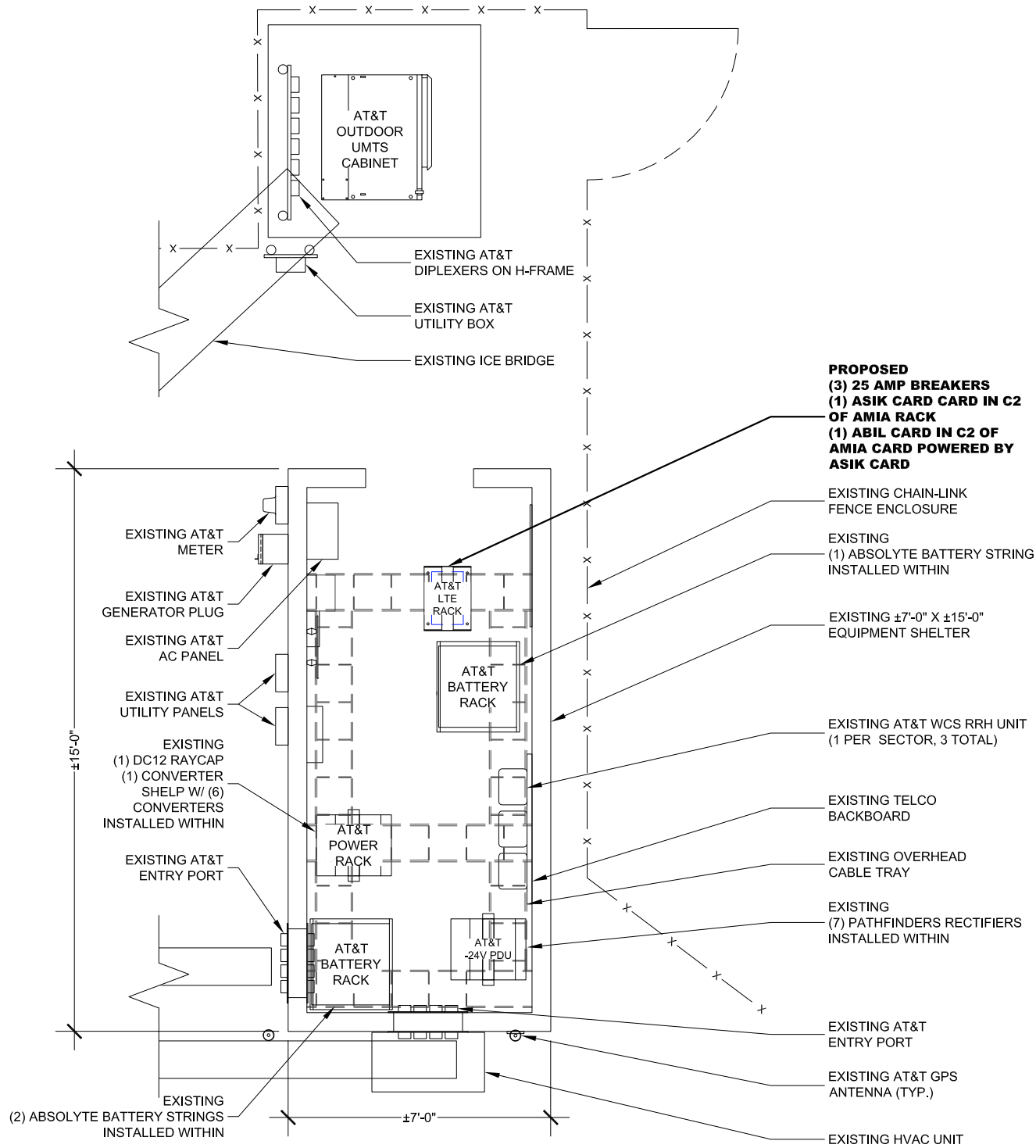
A-4



2  
A-4

EXISTING EQUIPMENT LAYOUT

11"x17" SCALE: 1" = 4'-0"



1  
A-4

FINAL EQUIPMENT LAYOUT

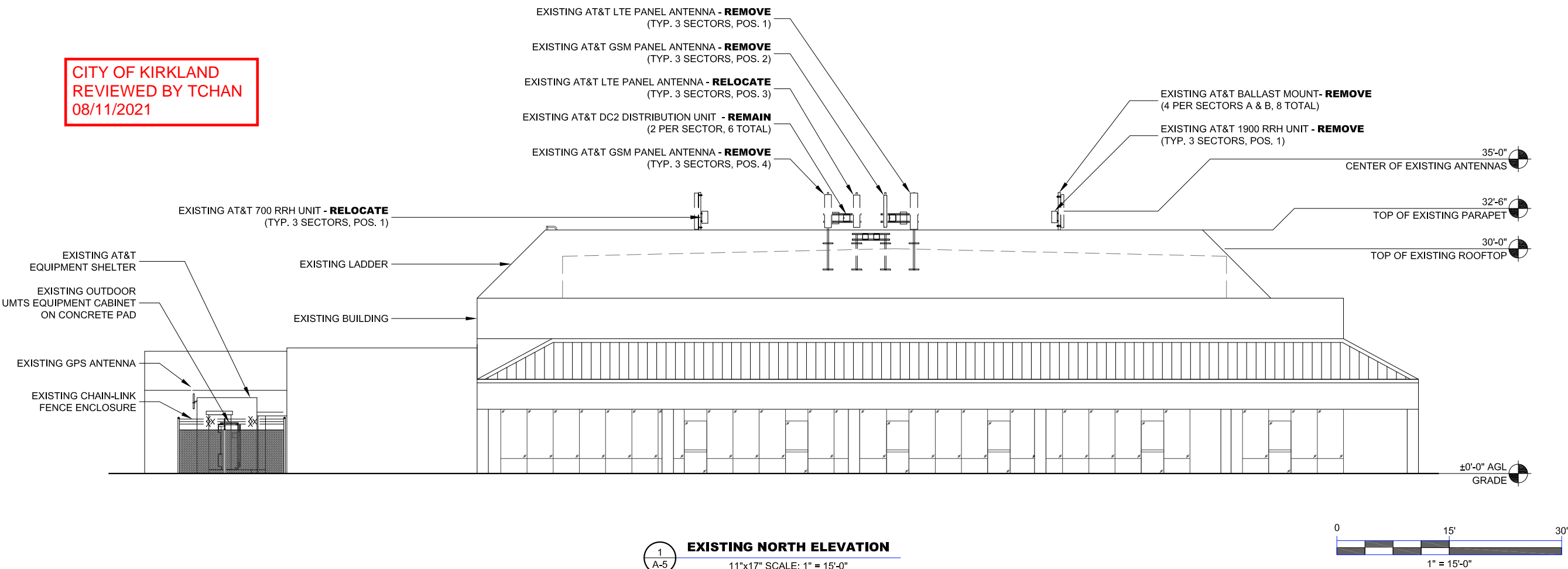
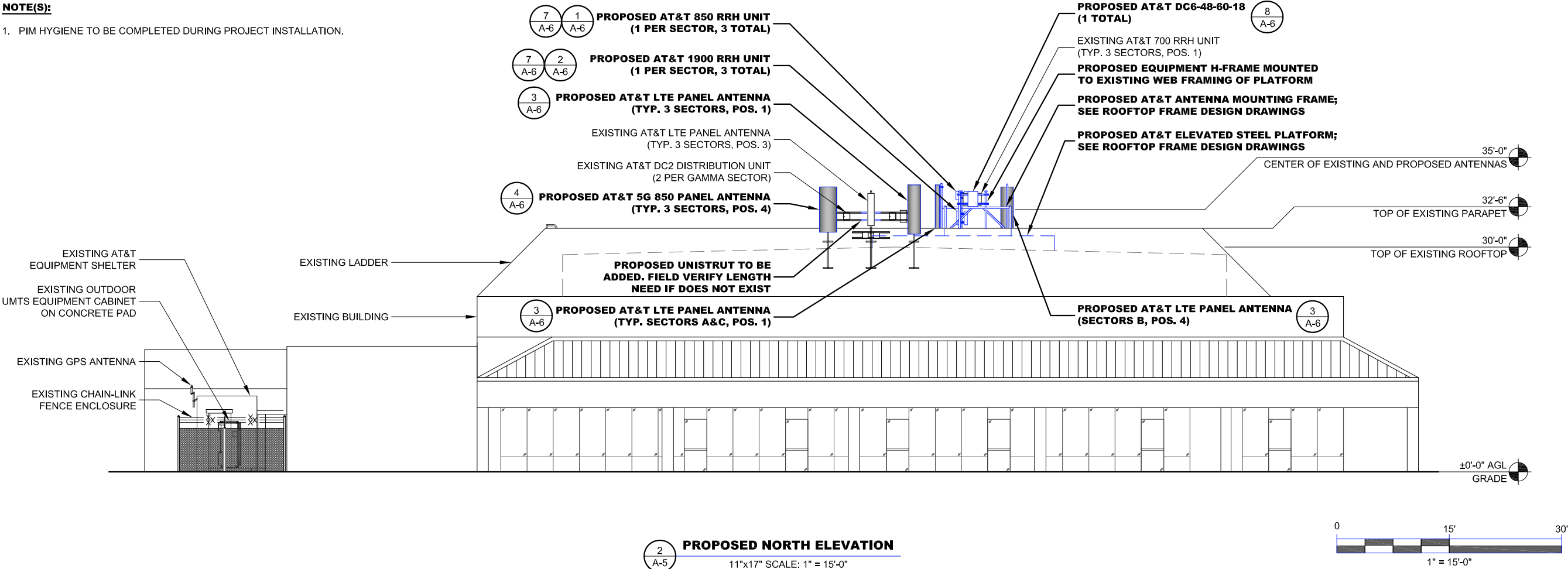
11"x17" SCALE: 1" = 4'-0"



FOR  
REFERENCE  
ONLY

NOTE(S):

1. PIM HYGIENE TO BE COMPLETED DURING PROJECT INSTALLATION.



CITY OF KIRKLAND  
REVIEWED BY TCHAN  
08/11/2021



RAPHAEL MOHAMED, P.E.  
WASHINGTON NO. 42214  
07/28/21

SUBMITTALS

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| 01/14/21 | CONSTRUCTION | 0   | AM        |
| 07/28/21 | JRX COMMENTS | 1   | AM        |
|          |              |     |           |
|          |              |     |           |
|          |              |     |           |

DRAWN BY: AJM  
CHECKED BY: AJM  
APPV'D BY: RM  
MNS PROJECT NO: 21545-AEC

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PREPARED FOR:



PREPARED BY:



SITE ID:

**SB29**

SITE NAME:

**KINGSGATE**

FA LOCATION:

**10092407**

SITE ADDRESS:

**14326 124TH AVENUE  
NORTHEAST  
KIRKLAND, WA 98034**

SHEET TITLE

**NORTH ELEVATION**

SHEET NUMBER

**A-5**



CITY OF KIRKLAND  
REVIEWED BY TCHAN  
08/11/2021

NOT USED

11"x17" SCALE: NTS

9

UNISTRUT SECURED  
TO MOUNTING PIPE  
(TYP.)

NOTES:

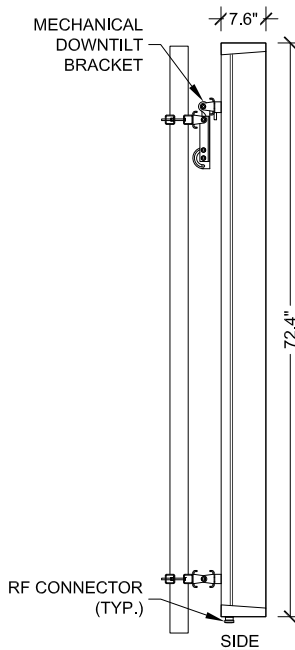
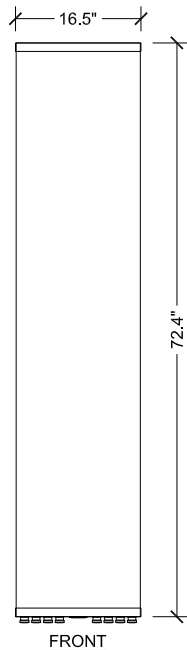
1. INSTALL ANCHORS/FASTENERS A MAXIMUM OF 2'-0" ON CENTER.
2. THROUGH BOLT - 1/4"Ø A36/A307 THREADED ROD W/ NUTS AND WASHERS ANCHORS AND UNISTRUT CHANNEL SHALL HAVE HOT-DIPPED GALVANIZED FINISH.
3. MOUNT RRH'S TO UNISTRUT WITH 3/8"Ø UNISTRUT BOLTING HARDWARE AND SPRING NUTS. TYPICAL FOUR PER DEVICE. SUBCONTRACTOR SHALL SUPPLY.
4. SUBCONTRACTOR SHALL SUPPLY ALL OTHER MATERIALS AND INSTALL ALL MOUNTING HARDWARE.

RRH

RRH MOUNTING

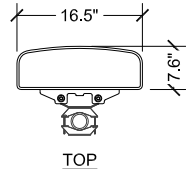
11"x17" SCALE: NTS

6



NOTES:

1. USE FIXED MOUNTING BRACKET FOR THE ANTENNA PER ATT-CEM18006 WHEN MECHANICAL DOWNTILT IS 0°.

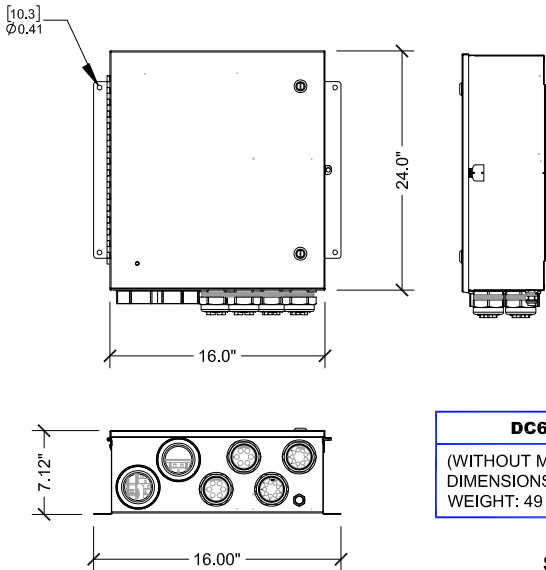


**CELLMAX**  
**CMA-UBTMLBMLBHH-6516-16-21-21**  
WEIGHT: 59.0 LBS  
DIMENSIONS: 72.4" x 16.5" x 7.6"

ANTENNA

11"x17" SCALE: NTS

3



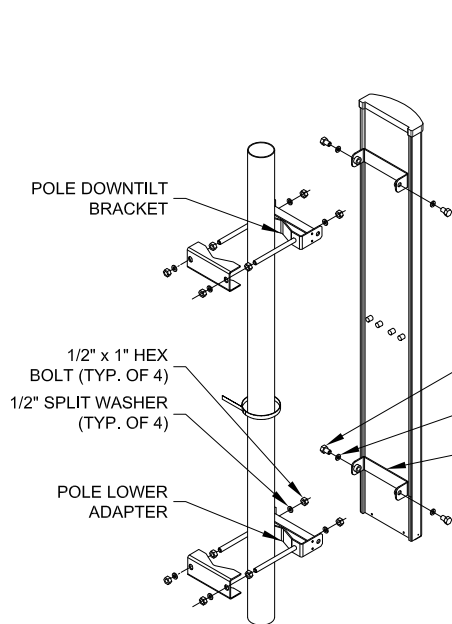
**DC6-48-60-18-8C-EV**

(WITHOUT MOUNTING HARDWARE)  
DIMENSIONS: 16.0"H x 24.00"L x 32.0"W  
WEIGHT: 49 LBS

SURGE PROTECTION

11"x17" SCALE: NTS

8



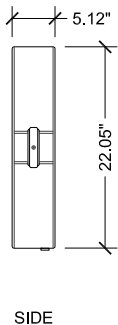
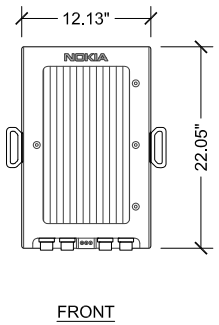
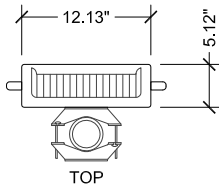
NOTES:

1. INSERT SCISSOR BRACKETS BETWEEN THE UPPER ANTENNA MOUNTING BRACKET AND THE UPPER POLE ADAPTER BRACKET. SECURE USING 1/2 INCH HARDWARE PROVIDED.
2. TO SET THE DEGREE OF DOWNTILT, ALIGN THE DESIRED HOLES ON THE SCISSOR BRACKETS AND SECURE USING 5/16 INCH HARDWARE PROVIDED.
3. THE NUMBER OF CONNECTORS WILL VARY BASED ON ANTENNA TYPE.
4. USE FIXED MOUNTING BRACKET FOR THE ANTENNA PER ATT-CEM18006 WHEN MECHANICAL DOWNTILT IS 0°.

ANTENNA MOUNTING

11"x17" SCALE: NTS

5



**NOKIA AIRSCALE RRH B25/66**  
**320W AHFIB**

DIMENSIONS: 22.05" x 12.13" x 5.12"  
(FMFB BOOK MOUNT)

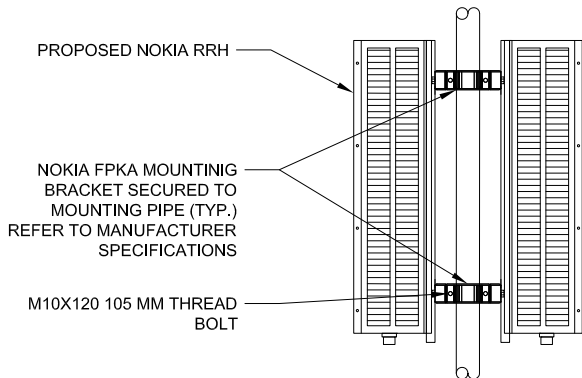
RRH SPECIFICATIONS

11"x17" SCALE: NTS

2

NOTES:

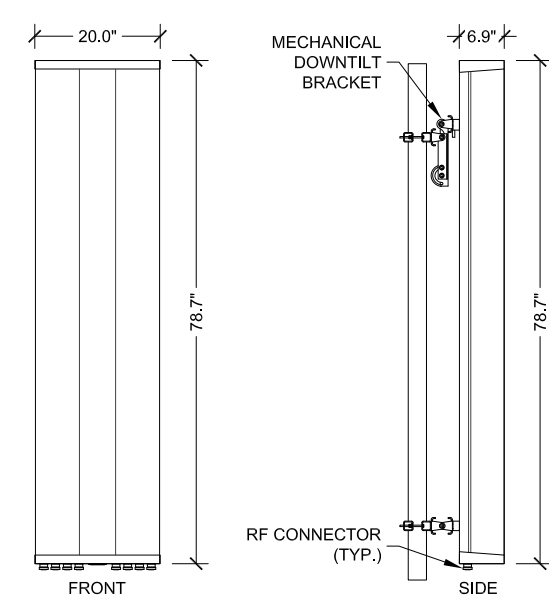
1. FPKA FLEXI POLE MOUNTING KIT (30-120 MM).
2. THE FLEXI POLE MOUNTING KIT (FPKA) IS DESIGNED FOR POLES WITH A DIAMETER BETWEEN 30 MM (1.2 IN.) AND 120 MM (4.7 IN.).



RRH MOUNTING

11"x17" SCALE: NTS

7



NOTES:

1. USE FIXED MOUNTING BRACKET FOR THE ANTENNA PER ATT-CEM18006 WHEN MECHANICAL DOWNTILT IS 0°.

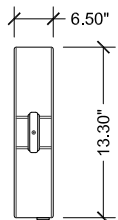
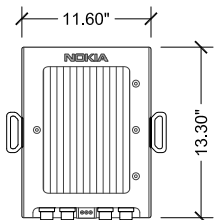
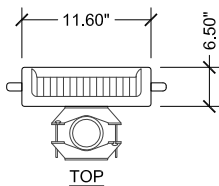
**KATHREIN 80010965**

WEIGHT: 97.6 LBS  
DIMENSIONS: 78.7" x 20.0" x 6.9"

ANTENNA

11"x17" SCALE: NTS

4



**FOR  
REFERENCE  
ONLY**

**NOKIA AIRSCALE RRH 4T4R**  
**B5 160W AHCA**

DIMENSIONS: 13.30" x 11.60" x 6.50"  
(FMFB BOOK MOUNT)

RRH SPECIFICATIONS

11"x17" SCALE: NTS

1



RAPHAEL MOHAMED, P.E.  
WASHINGTON NO. 42214

07/28/21

SUBMITTALS

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|----------|--------------|-----|-----------|
| 01/14/21 | CONSTRUCTION | 0   | AM        |
| 07/28/21 | JRX COMMENTS | 1   | AM        |
|          |              |     |           |
|          |              |     |           |
|          |              |     |           |

DRAWN BY: AJM  
CHECKED BY: AJM  
APPV'D BY: RM  
MNS PROJECT NO: 21545-AEC

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PREPARED FOR:



PREPARED BY:



SITE ID:

**SB29**

SITE NAME:

**KINGSGATE**

FA LOCATION:

**10092407**

SITE ADDRESS:

**14326 124TH AVENUE  
NORTHEAST  
KIRKLAND, WA 98034**

SHEET TITLE

**RF EQUIPMENT**

SHEET NUMBER

**A-6**

NOT USED  
11"x17" SCALE: NTS

9

NOT USED  
11"x17" SCALE: NTS

6

NOT USED  
11"x17" SCALE: NTS

3

NOT USED  
11"x17" SCALE: NTS

8

NOT USED  
11"x17" SCALE: NTS

5


NOTE:

1. REFERENCE RFSSRP PACKAGE FOR  
ADDITIONAL INFORMATION.

8"

1'-0"

CAUTION



AT&T operates antennas at this site.  
Beyond this point you are entering an area where radio frequency (RF) fields may exceed the FCC General Population Exposure Limits.  
Follow safety guidelines for working in an RF environment.  
Contact AT&T at 800-638-2822, option 9 and 3, and follow their instructions prior to performing maintenance or repairs beyond this point.

THIS IS AT&T WORK

CAUTION 2C SIGNAGE  
CAUTION 2 SIGNAGE

11"x17" SCALE: NTS

2

NOT USED  
11"x17" SCALE: NTS

7

NOT USED  
11"x17" SCALE: NTS

4

FOR  
REFERENCE  
ONLY

6'-0" MIN  
BETWEEN POSTS

(N) ROPE OR CHAIN  
BETWEEN ALL  
POSTS/SUPPORTS

(E) ROOF SURFACE

PROPOSED BARRIER


11"x17" SCALE: NTS

1

CITY OF KIRKLAND  
REVIEWED BY TCHAN  
08/11/2021

RAPHAEL MOHAMED, P.E.  
WASHINGTON NO. 42214

07/28/21

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|------------|--------------|-----|--|
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|            |              |     |  |
|            |              |     |  |
|            |              |     |  |

DRAWN BY: AJM

CHECKED BY: AJM

APPV'D BY: RM

MNS PROJECT NO: 21545-AEC

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PREPARED FOR:

PREPARED BY:

MasTec

Network Solutions

507 AIRPORT BLVD, SUITE 111  
MORRISVILLE, NC 27560

SITE ID:  
SB29

SITE NAME:  
KINGSGATE

FA LOCATION:  
10092407

SITE ADDRESS:  
14326 124TH AVENUE  
NORTHEAST  
KIRKLAND, WA 98034

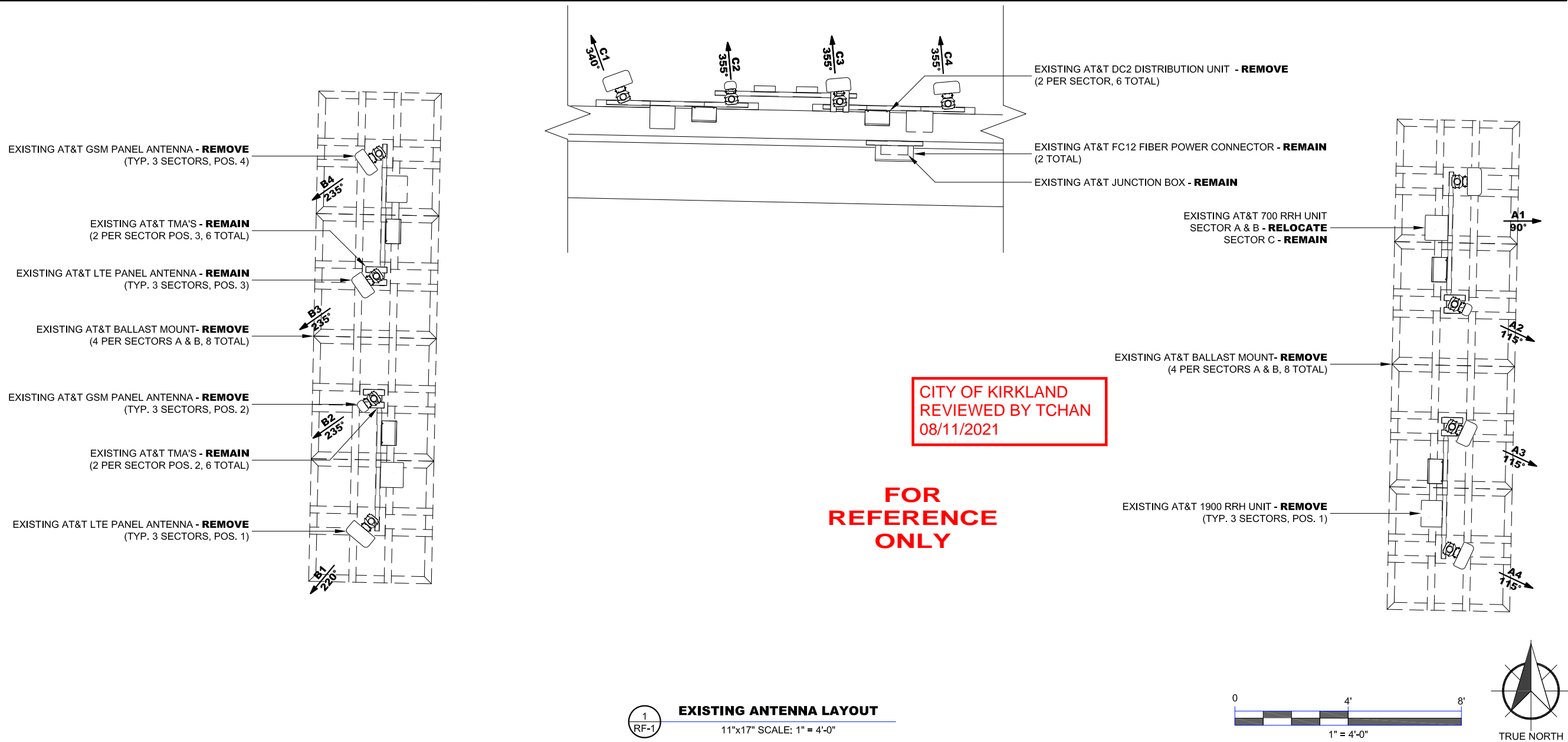
SHEET TITLE  
RF EQUIPMENT

SHEET NUMBER  
A-6.1

BNR21-03922 APPROVED PLANS - AT&T Mobility - 08/11/21 Page 10 of 24



| EXISTING RF EQUIPMENT SCHEDULE              |                |                        |   |         |         |           |   |                                       |                 |                         |                 |              |
|---|----------------|------------------------|---|---------|---------|-----------|---|---------------------------------------|-----------------|-------------------------|-----------------|--------------|
| SECTOR - POSITION                           | FREQUENCY BAND | ANTENNA MAKE/MODEL     | RAD CENTER  | AZIMUTH | E. TILT | M. TILT   | (QTY.) RADIO                                      | (QTY.) TMA                            | (QTY.) DIPLEXER | (QTY.) SURGE PROTECTION | (QTY.) CABLES   | CABLE LENGTH |
| A1  | LTE 700/1900   | KATHREIN 80010764 (RM) | 35'-0"  | 90°     | 4°/2°   | 0°        | (1) RRH2X40W_7L (RL)<br>(1) RRH2X60-1900A-4R (RM) | -                                     | -               | (2) DC2-48-60-0-9E (RM) | (1) FIBER       | 0'-0"        |
| A2  | GSM 1900       | POWERWAVE 7262 (RM)    | 35'-0"  | 115°    | 0°      | 0°        | -   | (2) NOKIA MHA<br>CS72993.08_(G9) (RM) | -               | -                       | (2) 1-5/8" COAX | 137'-0"      |
| A3  | UMTS 850/1900  | KATHREIN 742-264       | 35'-0"  | 115°    | 7°/2°   | 1°        | -   | (2) 2-LGP 21401_(YES -<br>U9 U9_1);   | -               | -                       | (2) 1-5/8" COAX | 137'-0"      |
| A4  | GSM 850        | POWERWAVE 7850 (RM)    | 35'-0"  | 115°    | 2°      | 0°        | -   | -                                     | -               | -                       | (2) 7/8" COAX   | 137'-0"      |
| B1  | LTE 700/1900   | KATHREIN 80010764 (RM) | 35'-0"  | 220°    | 0°      | 0°        | (1) RRH2X40W_7L (RL)<br>(1) RRH2X60-1900A-4R (RM) | -                                     | -               | (2) DC2-48-60-0-9E (RM) | (1) FIBER       | 0'-0"        |
| B2  | GSM 1900       | POWERWAVE 7262 (RM)    | 35'-0"  | 235°    | 0°      | 0°        | -   | (2) NOKIA MHA<br>CS72993.08_(G9) (RM) | -               | -                       | (2) 1-5/8" COAX | 137'-0"      |
| B3  | UMTS 850/1900  | KATHREIN 742-264       | 35'-0"  | 235°    | 7°/3°   | 3°        | -   | (2) 2-LGP 21401_(YES -<br>U9 U9_1);   | -               | -                       | (2) 1-5/8" COAX | 137'-0"      |
| B4  | GSM 850        | POWERWAVE 7850 (RM)    | 35'-0"  | 235°    | 10°     | 2°        | -   | -                                     | -               | -                       | (2) 7/8" COAX   | 137'-0"      |
| C1  | LTE 700/1900   | KATHREIN 80010764 (RM) | 35'-0"  | 340°    | 4°/2°   | 0°        | (1) RRH2X40W_7L<br>(1) RRH2X60-1900A-4R (RM)      | -                                     | -               | (2) DC2-48-60-0-9E      | (1) FIBER       | 0'-0"        |
| C2  | GSM 1900       | POWERWAVE 7262 (RM)    | 35'-0"  | 355°    | 0°      | 0°        | -   | (2) NOKIA MHA<br>CS72993.08_(G9) (RM) | -               | -                       | (2) 1-5/8" COAX | 137'-0"      |
| C3  | UMTS 850/1900  | KATHREIN 742-264       | 35'-0"  | 355°    | 1°/0°   | 0°        | -   | (2) 2-LGP 21401_(YES -<br>U9 U9_1);   | -               | -                       | (2) 1-5/8" COAX | 137'-0"      |
| C4  | GSM 850        | POWERWAVE 7850 (RM)    | 35'-0"  | 355°    | 0°      | 0°        | -   | -                                     | -               | -                       | (2) 7/8" COAX   | 137'-0"      |
| TOTALS                                      |                | (12) ANTENNAS          | -   |         |         | (6) RRU'S |   | (12) TMA'S                            | -               | (6) SPD                 | -               | -            |
| LEGEND:<br>(RM) = REMOVE<br>(RL) = RELOCATE |                |                        | NOTE(S):<br>1. RF INFORMATION OBTAINED FROM REV 3.00 RFDS DATED 11/13/2020. |         |         |           |   |                                       |                 |                         |                 |              |



RAPHAEL MOHAMED, P.E.  
WASHINGTON NO. 42214 07/28/21

| SUBMITTALS |              |     |           |
|------------|--------------|-----|-----------|
| DATE       | DESCRIPTION  | REV | ISSUED BY |
| 01/14/21   | CONSTRUCTION | 0   | AM        |
| 07/28/21   | JRX COMMENTS | 1   | AM        |
|            |              |     |           |
|            |              |     |           |
|            |              |     |           |

DRAWN BY: AJM  
CHECKED BY: AJM  
APPV'D BY: RM  
MNS PROJECT NO: 21545-AEC

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SITE ID:  
**SB29**

SITE NAME:  
**KINGSGATE**

FA LOCATION:  
**10092407**

SITE ADDRESS:  
**14326 124TH AVENUE  
NORTHEAST  
KIRKLAND, WA 98034**










SHEET TITLE  
**EXISTING ANTENNA LAYOUT**

SHEET NUMBER  
**RF-1**





CITY OF KIRKLAND  
REVIEWED BY TCHAN  
08/11/2021

| SYMBOL  | DESCRIPTION                                       |
|---|---|
|  | COPPER GROUND ROD                                 |
|  | MECHANICAL GROUND                                 |
|  | CAD WELD CONNECTION                               |
|  | EXOTHERMIC WELD                                   |
|  | TEST WELL   |
|  | GROUND BAR  |
|  | GROUND WIRE                                       |
|  | #2 AWG GROUND RING                                |
|  | FIELD VERIFY & TIE INTO EXISTING GROUNDING SYSTEM |

GENERAL NOTES:

- ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
- GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED BUS BARS. FOLLOW ANTENNA AND BTS MANUFACTURER'S PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING MANUFACTURERS PRACTICES.
- ALL GROUND CONNECTIONS SHALL BE CADWELD. ALL WIRES SHALL BE COPPER THHN/THWN. ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
- CONTRACTOR TO VERIFY AND TEST GROUND SOURCE, GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY WIRELESS REPRESENTATIVE.
- REFER TO DIVISION 16 GENERAL ELECTRIC; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING STANDARDS.
- ELECTRICAL CONTRACTOR TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM, AND RECEIVE APPROVAL OF DESIGN BY AUTHORIZED WIRELESS REPRESENTATIVE, PRIOR TO INSTALLATION OF GROUNDING SYSTEM. PHOTO DOCUMENT ALL CADWELDS AND GROUND RINGS.
- NOTIFY CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.
- USE PANI SCHEME FOR LOADING GROUNDS ON MGB AS DISCUSSED IN NSTD 119, 33 & 36.


GROUND ROD NOTES:

- ELECTRICAL CONTRACTOR SHALL ORDER GROUND RESISTANCE TESTING ONCE THE GROUND SYSTEM HAS BEEN INSTALLED; A QUALIFIED INDIVIDUAL, UTILIZING THE FALL OF POTENTIAL METHOD, SHOULD PERFORM THE TEST. THE REPORT WILL SHOW THE LOCATION OF THE TEST AND CONTAIN NO LESS THAN 9 TEST POINTS ALONG THE TESTING LINE, GRAPHED OUT TO SHOW THE PLATEAU.
- POINT GROUND TEST OR 3 POINT 62% TESTS WILL NOT BE ACCEPTED AS ALTERNATIVES TO THE AFORE MENTIONED GROUND TESTS. TEST SHALL BE PERFORMED WHILE THE COUNTERPOISE IS ISOLATED FROM THE A/C SYSTEM GRIDS AND EXISTING COMMUNICATIONS FACILITY.



RAPHAEL MOHAMED, P.E. 07/28/21  
WASHINGTON NO. 42214

SUBMITTALS

| DATE     | DESCRIPTION  | REV | ISSUED BY  |
|----------|--------------|-----|--|
| 01/14/21 | CONSTRUCTION | 0   | AM   |
| 07/28/21 | JRX COMMENTS | 1   | AM  |
|          |              |     |  |
|          |              |     |  |
|          |              |     |  |

DRAWN BY: AJM  
CHECKED BY: AJM  
APPV'D BY: RM  
MNS PROJECT NO: 21545-AEC

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PREPARED FOR:



PREPARED BY:

**MasTec**  
Network Solutions  
507 AIRPORT BLVD, SUITE 111  
MORRISVILLE, NC 27560

SITE ID:

**SB29**

SITE NAME:

**KINGSGATE**

FA LOCATION:

**10092407**

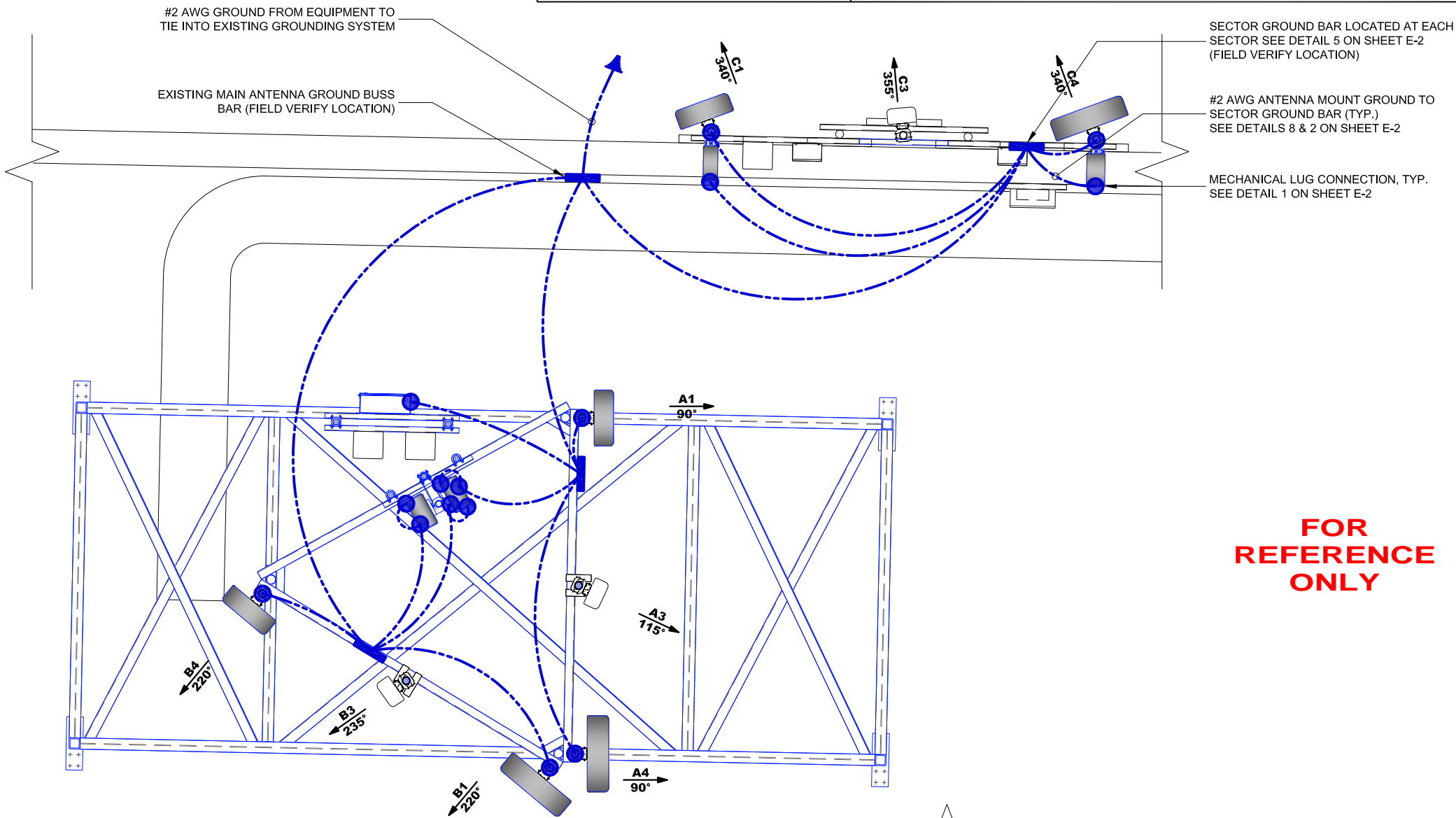
SITE ADDRESS:

**14326 124TH AVENUE  
NORTHEAST  
KIRKLAND, WA 98034**

SHEET TITLE  
**GROUNDING SCHEMATIC  
PLAN**

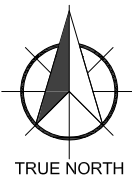
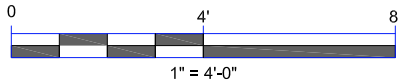
SHEET NUMBER

**E-1**



**FOR  
REFERENCE  
ONLY**

1  
E-1  
**FINAL EQUIPMENT LAYOUT**  
11"x17" SCALE: 1" = 4'-0"



NOT USED

11"x17" SCALE: NTS

15

NOT USED

11"x17" SCALE: NTS

11

NOT USED

11"x17" SCALE: NTS

7

NOT USED

11"x17" SCALE: NTS

4

NOT USED

11"x17" SCALE: NTS

14

NOT USED

11"x17" SCALE: NTS

10

NOT USED

11"x17" SCALE: NTS

6

NOT USED

11"x17" SCALE: NTS

3

NOT USED

11"x17" SCALE: NTS

13

NOT USED

11"x17" SCALE: NTS

9

NOTE:

COAT ALL MECHANICAL CONNECTIONS WITH "NOOX" OR APPROVED EQUAL

4"

24" (VERIFY)

#2 SOLID BARE TINNED COPPER WIRE

COAXIAL GROUND KITS W/ LONG BARREL COMPRESSION DOUBLE LUGS, ATTACH TO GROUND BAR & INSTALLED BY ANTENNA CONTRACTOR

COPPER GROUND BAR, INSTALLED BY GENERAL CONTRACTOR

GROUND BAR

11"x17" SCALE: NTS

2

ANTENNA CABLE

2 1/2" DIA. MAX.

(TYPICALLY) 12"-24" 120" MAX.

WEATHERPROOFING KIT (SEE NOTE 3)

CABLE GROUND KIT

CABLE CONNECTOR

NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.

2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.

3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

TO ANTENNAS

RX2

TX1/RX1

WEATHERPROOFING KIT (TYP.)

GROUND KIT (TYP.)

COAX JUMPER (TYP.)

CONNECTOR WEATHERPROOFING KIT (TYP.)

ANTENNA CABLE TO BTS EQUIPMENT (TYP.)

NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.

2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

COPPER GROUND BAR ON WALL, ICE BRIDGE, FLOOR OR ON ANTENNA TOWER

\*TWO HOLE LUG, OR EXOTHERMIC WELD TO BE USED WITH #2 AWG BCW TO BUILDING SERVICE GROUND OR GROUND RING

GROUND CONDUCTOR SHALL BE ELIMINATED WHEN GROUND BAR IS ELECTRICALLY BONDED TO METAL TOWER/MONOPOLE STRUCTURE

NOTE:

GROUND BARS AT BOTTOM OF TOWERS/MONOPOLES SHALL ONLY USE EXOTHERMIC WELDS.

TYPE TA

TYPE VN

TYPE NC

TYPE SS

TYPE VV

TYPE VS

TYPE VB

TYPE PT

TYPE GT

TYPE GY

TYPE GR

TYPE GL

CONNECTIONS

11"x17" SCALE: NTS

1

CITY OF KIRKLAND  
REVIEWED BY TCHAN  
08/11/2021

FOR  
REFERENCE  
ONLY

RAPHAEL MOHAMED

STATE OF WASHINGTON

42214

REGISTERED PROFESSIONAL ENGINEER

RAPHAEL MOHAMED, P.E.

WASHINGTON NO. 42214

07/28/21

| SUBMITTALS  |              |           |                     |
|---|--------------|-----------|---------------------|
| DATE  | DESCRIPTION  | REV       | ISSUED BY           |
| 01/14/21  | CONSTRUCTION | 0         | AM                  |
| 07/28/21  | JRX COMMENTS | 1         | AM <span>△</span> 1 |
|   |              |           |                     |
|   |              |           |                     |
|   |              |           |                     |
|   |              |           |                     |
| DRAWN BY:   |              | AJM       |                     |
| CHECKED BY:   |              | AJM       |                     |
| APPV'D BY:  |              | RM        |                     |
| MNS PROJECT NO:   |              | 21545-AEC |                     |
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at&t

PREPARED BY:

MasTec

Network Solutions

507 AIRPORT BLVD, SUITE 111  
MORRISVILLE, NC 27560

SITE ID:

SB29

SITE NAME:

KINGSGATE

FA LOCATION:

10092407

SITE ADDRESS:

14326 124TH AVENUE  
NORTHEAST  
KIRKLAND, WA 98034

SHEET TITLE

GROUNDING DETAILS

SHEET NUMBER

E-2

BNR21-03922 APPROVED PLANS - AT&T Mobility - 08/11/21 Page 14 of 24

# ROOFTOP FRAME DESIGN DRAWINGS PREPARED FOR AT&T

SITE NAME: KINGSGATE  
SITE NUMBER: SB29  
FA#: 10092407

SITE ADDRESS:  
14326 124TH NE  
KIRKLAND, WA 98034

PROJECT CONTACTS:

1. DESIGN ENGINEER - MAIN RFI CONTACT  
JOSEPH KING, PE  
304-841-1569  
JOSEPH.KING2@MASTEC.COM
2. ENGINEER OF RECORD  
RAPHAEL I. MOHAMED, PE, PENG  
919-674-5895  
507 AIRPORT BLVD.  
SUITE 111  
MORRISVILLE, NC 27560  
RAPHAEL.MOHAMED@MASTEC.COM
3. FOR FABRICATION AND CONSTRUCTION  
RELATED INQUIRIES: CONTACT MASTEC  
DESIGN ENGINEER AND ENGINEER OF RECORD.

**BUILDING INFORMATION**

BUILDING HEIGHT / TYPE:32.5 FT ROOFTOP

BUILDING LOCATION:LAT:47.73064°  
LONG:-122.17317°

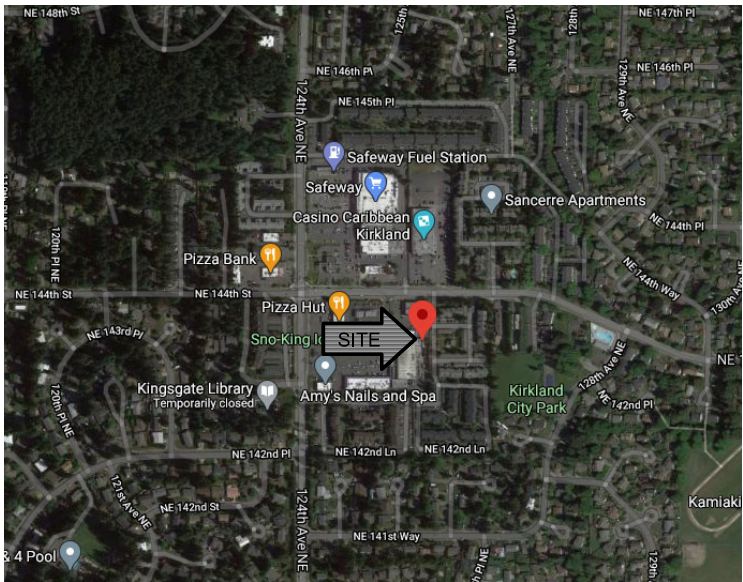
FAILING ANALYSIS FIRM NAME:MASTEC NETWORK SOLUTIONS  
PROJECT NUMBER:21545-SAR1  
STRUCTURAL ANALYSIS DATE:08/25/2020

PASSING ANALYSIS FIRM NAME:MASTEC NETWORK SOLUTIONS  
PROJECT NUMBER:21545-MOD3

**CODE COMPLIANCE**

ANSI/TIA-222-H  
2018 INTERNATIONAL BUILDING CODE

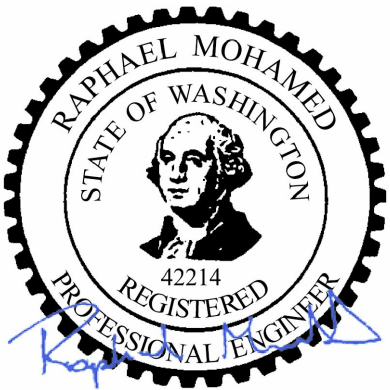
CITY OF KIRKLAND  
REVIEWED BY TCHAN  
08/11/2021



QUALIFIED ENGINEERING SERVICES ARE AVAILABLE FROM MASTEC NETWORK SOLUTIONS TO ASSIST CONTRACTORS IN CLASS IV RIGGING PLAN REVIEWS. FOR REQUESTED QUALIFIED ENGINEERING SERVICES, PLEASE CONTACT RAPHAEL MOHAMED AT (919) 244-5207.

**DRAWINGS INCLUDED**

| SHEET NO. | DESCRIPTION                       | SHEET NO. | DESCRIPTION |
|-----------|-----------------------------------|-----------|-------------|
| T-1       | TITLE SHEET                       |           |             |
| N-1       | MODIFICATION INSPECTION CHECKLIST |           |             |
| N-2       | NOTES                             |           |             |
| N-3       | NOTES (CONTINUED)                 |           |             |
| S-1       | MODIFICATION SCHEDULE             |           |             |
| S-2       | ROOFTOP PLAN VIEW                 |           |             |
| S-3       | PLATFORM FRAMING PLAN             |           |             |
| S-4       | PLATFORM ELEVATION VIEW           |           |             |
| S-5       | CONNECTION DETAILS                |           |             |
| A-1       | MANUFACTURER SPECIFICATIONS       |           |             |



I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WASHINGTON.



| NO. | DATE     | DESCRIPTION      | BY  |
|-----|----------|------------------|-----|
| 1   | 07/23/21 | REVISED DRAWINGS | JMB |
| 0   | 09/11/20 | FIRST ISSUE      | JMB |

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SITE NAME: KINGSGATE  
SITE NUMBER: SB29  
FA NUMBER: 10092407  
MNS ENG. NUMBER: 21545 - MOD3  
SITE ADDRESS:  
14326 124TH AVE NE  
KIRKLAND, WA 98034

DRAWN BY: JMB  
CHECKED BY: JRK  
APPROVED BY: RIM  
SCALE: N.T.S

**TITLE SHEET**

T-1  
REV 1



## GENERAL

THE MI IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF, NOR DOES THE MI INSPECTOR TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTEGRITY RESIDES WITH THE EOR AT ALL TIMES.

TO ENSURE THAT THE REQUIREMENTS OF THE MI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE MI INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PO IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY. IF CONTACT INFORMATION IS NOT KNOWN, CONTACT YOUR MASTEC POINT OF CONTACT (POC).

THE MI INSPECTOR IS REQUIRED TO CONTACT THE GC AS SOON AS RECEIVING A PO FOR THE MI TO, AT A MINIMUM:

- THE MI INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GENERAL CONTRACTOR (GC) INSPECTION AND TEST REPORTS, REVIEWING THE DOCUMENTS FOR ADHERENCE TO THE CONTRACT DOCUMENTS, CONDUCTING THE IN-FIELD INSPECTIONS, AND SUBMITTING THE MI REPORT TO MASTEC.

THE GC IS REQUIRED TO CONTACT THE MI INSPECTOR AS SOON AS RECEIVING A PO FOR THE MODIFICATION INSTALLATION OR TURNKEY PROJECT TO, AT A MINIMUM:

- THE GC SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MI CHECKLIST.

THE FOLLOWING RECOMMENDATIONS AND SUGGESTIONS ARE OFFERED TO ENHANCE THE EFFICIENCY AND EFFECTIVENESS OF DELIVERING A MI REPORT:

- IF THE GC AND MI INSPECTOR AGREE TO A DATE ON WHICH THE MI WILL BE CONDUCTED, AND EITHER PARTY CANCELS OR DELAYS, MASTEC SHALL NOT BE RESPONSIBLE FOR ANY COSTS, FEES, LOSS OF DEPOSITS AND/OR OTHER PENALTIES RELATED TO THE CANCELLATION OR DELAY INCURRED BY EITHER PARTY FOR ANY TIME (E.G. TRAVEL AND LODGING, COSTS OF KEEPING EQUIPMENT ON-SITE, ETC.). IF MASTEC CONTRACTS DIRECTLY FOR A THIRD PARTY MI, EXCEPTIONS MAY BE MADE IN THE EVENT THAT THE DELAY/CANCELLATION IS CAUSED BY WEATHER OR OTHER CONDITIONS THAT MAY COMPROMISE THE SAFETY OF THE PARTIES INVOLVED.

IF THE MODIFICATION INSTALLATION WOULD FAIL THE MI ("FAILED MI"), THE GC SHALL WORK WITH MASTEC TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:

- MASTEC RESERVES THE RIGHT TO CONDUCT A MI VERIFICATION INSPECTION TO VERIFY THE ACCURACY AND COMPLETENESS OF PREVIOUSLY COMPLETED MI INSPECTION(S) ON TOWER MODIFICATION PROJECTS.

VERIFICATION INSPECTION MAY BE CONDUCTED BY AN INDEPENDENT AEV/AESV FIRM AFTER A MODIFICATION PROJECT IS COMPLETED, AS MARKED BY THE DATE OF AN "PASS AS NOTED MI" ACCEPTED REPORT FOR THE ORIGINAL OR PASSING MI" PROJECT.

BETWEEN THE GC AND THE MI INSPECTOR THE FOLLOWING PHOTOGRAPHS, AT A MINIMUM, ARE TO BE TAKEN AND INCLUDED IN THE MI REPORT:

- |  |           |      |             |    |                                     |
|--|-----------|------|-------------|----|-------------------------------------|
| PHOTOS OF ELEVATED MODIFICATIONS TAKEN FROM THE GROUND SHALL BE CONSIDERED INADEQUATE. | NO.       | DATE | DESCRIPTION | BY | THE STATE OF MASTEC NETWORK PROFILE |
|  | REVISIONS |      |             |    |                                     |
|  |           |      |             |    |                                     |

| MI CHECKLIST  |  |
|---|--|
| CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY EOR) | REPORT ITEM  |
| PRE-CONSTRUCTION  |  |
| X   | MI CHECKLIST DRAWING                                   |
| X   | EOR APPROVAL   |
| X   | FABRICATION INSPECTION                                 |
| X   | FABRICATOR CERTIFIED WELD INSPECTION                   |
| X   | MATERIAL TEST REPORT (MTR)                             |
| N/A   | FABRICATOR NDE INSPECTION                              |
| N/A   | NDE REPORT OF BASE PLATE                               |
| X   | PACKING SLIPS  |
| ADDITIONAL TESTING AND INSPECTIONS:   |  |
|   |  |
| CONSTRUCTION  |  |
| X   | CONSTRUCTION INSPECTIONS                               |
| N/A   | CONTINUOUS FOUNDATION INSPECTIONS                      |
| N/A   | CONCRETE COMP. STRENGTH AND SLUMP TESTS                |
| N/A   | GROUT COMP. STRENGTH (ASTM C109)                       |
| N/A   | POST INSTALLED ANCHOR ROD VERIFICATION                 |
| N/A   | BASE PLATE GROUT VERIFICATION                          |
| N/A   | CONTRACTOR'S CERTIFIED WELD INSPECTION AND NDE REPORTS |
| N/A   | EARTHWORK: LIFT AND DENSITY                            |
| X   | ON SITE COLD GALVANIZING VERIFICATION                  |
| N/A   | GUY WIRE TENSION REPORT                                |
| X   | GC AS-BUILT DOCUMENTS                                  |
| ADDITIONAL TESTING AND INSPECTIONS:   |  |
| POST-CONSTRUCTION   |  |
| X   | MI INSPECTOR REDLINE OR RECORD DRAWING(S)              |
| N/A   | POST INSTALLED ANCHOR ROD PULL-OUT TESTING             |
| X   | PHOTOGRAPHS  |
|   |  |
| ADDITIONAL TESTING AND INSPECTIONS:   |  |

CITY OF KIRKLAND  
REVIEWED BY TCHAN  
08/11/2021

1. ALL WORK PRESENTED ON THESE DRAWINGS SHALL BE COMPLETED BY THE CONTRACTOR UNLESS OTHERWISE (UNO). THE CONTRACTOR MUST BE EXPERIENCED IN THE PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED, THAT HE IS PROPERLY LICENSED, AND THAT HE IS PROPERLY REGISTERED TO DO THIS WORK IN THE STATE AND/OR COUNTY IN WHICH THE WORK IS TO BE PERFORMED.
2. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH THE ANSI/TIA-322 (LATEST EDITION).
3. THE NOTES AND TYPICAL DETAILS ARE APPLICABLE TO ALL PARTS OF THE STRUCTURE AND SHALL BE READ IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS AND PROJECT SPECIFICATIONS. STRUCTURAL DRAWINGS SHALL GOVERN OVER ANY VARIANCE FROM THIS SHEET.
4. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING APPROVALS FROM ALL AUTHORITIES HAVING JURISDICTION FOR THIS PROJECT AND SHALL NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY, OR CITY) ENGINEER 24 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION. FOR JURISDICTIONS THAT LICENSE INDIVIDUAL TRADES, THE TRADESMAN OR SUBCONTRACTORS PERFORMING THOSE TRADES SHALL BE LICENSED, RESEARCH AND COMPLY WITH LICENSING LAWS, PAY LICENSE FEES, AND SELECT AND INFORM SUBCONTRACTORS REGARDING THESE LAWS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
5. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, POSSIBLE INTERFERENCES, AND DIMENSIONS BEFORE PROCEEDING WITH THE WORK. REPORT ANY AND ALL DISCREPANCIES TO THE MASTEC ENGINEER OF RECORD (EOR) AND TOWER OWNER FIELD PERSONNEL IMMEDIATELY. ANY AND ALL FIELD CHANGES SHALL BE APPROVED AND DOCUMENTED BY THE EOR PRIOR TO FIELD IMPLEMENTATION. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED DUE TO DIFFERENCES BETWEEN ACTUAL DIMENSIONS OR DIMENSIONS SHOWN ON PLANS. NO PLEA OF IGNORANCE OF CONDITIONS THAT EXIST OR OF DIFFICULTIES OF CONDITIONS THAT MAY BE ENCOUNTERED, OR OF ANY OTHER RELEVANT MATTER CONCERNING THE EXECUTION OF THE WORK WILL BE ACCEPTED AS AN EXCUSE FOR ANY FAILURE OR OMISSION ON THE PART OF THE CONTRACTOR TO FULFILL EVERY DETAIL OF ALL THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS GOVERNING THE WORK.
6. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR TWO (2) YEARS FROM THE DATE OF COMPLETED CONSTRUCTION.
7. ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH ANSI, ASTM, ACI, TIA, AND AISC STANDARDS AS REFERENCED IN THE APPLICABLE CODES. USE ONLY THE LATEST ISSUES OF ANY APPLICABLE CODES, STANDARDS, OR REGULATIONS MENTIONED IN THE FOLLOWING NOTES AND SPECIFICATIONS, UNO.
8. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS, AND IN CONFORMANCE WITH THE DRAWINGS. ANY AND ALL SUBSTITUTIONS MUST BE DULY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER OF RECORD PRIOR TO FABRICATION AND INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
9. ALL MANUFACTURER'S HARDWARE ASSEMBLY INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION PROCEDURES MEET THE REQUIREMENTS OF OSHA, THE OWNER, AND ALL OTHER APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS. THESE REGULATIONS INCLUDE BUT ARE NOT LIMITED TO REGULATIONS DEALING WITH TOWER CONSTRUCTION AND SAFETY, EXCAVATIONS AND TRENCHING, ERECTION OF GUARDS AND BARRIERS, AND WORK IN CONFINED SPACES. ENSURE THAT EMPLOYEES AND SUBCONTRACTORS WEAR HARD HATS AT ALL TIMES DURING CONSTRUCTION.
11. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIAL ACCESS, WITH THE RESIDENT LEASING AGENT.
12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SAFEGUARD ALL EXISTING STRUCTURES OR BURIED SERVICES AFFECTED BY THIS CONSTRUCTION. CONTRACTOR IS ALSO RESPONSIBLE FOR TEMPORARILY RELOCATING ANY LINES OR STRUTS AS NECESSARY TO COMPLETE THE REQUIRED WORK. THE CONTRACTOR IS COMPLETELY RESPONSIBLE FOR CONTAINMENT OF SEDIMENT AND CONTROL OF EROSION AT THE SITE. ANY DAMAGE TO ADJACENT OR DOWNSTREAM PROPERTIES WILL BE CORRECTED BY THE CONTRACTOR. THE CONTRACTOR IS TO MAINTAIN ADEQUATE DRAINAGE AT ALL TIMES. DO NOT ALLOW WATER TO STAND OR POND. ANY DAMAGE TO STRUCTURES OR WORK ON THE SITE CAUSED BY INADEQUATE MAINTENANCE OF DRAINAGE PROVISIONS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND ANY COST ASSOCIATED WITH REPAIRS FOR SUCH DAMAGE WILL BE AT THE CONTRACTOR'S EXPENSE.
13. STRUCTURAL DESIGN IS FOR THE COMPLETE CONDITION ONLY. THE CONTRACTOR MUST BE COGNIZANT THAT THE REMOVAL OF ANY STRUCTURAL COMPONENT OF AN EXISTING TOWER HAS THE POTENTIAL TO CAUSE THE PARTIAL OR COMPLETE COLLAPSE OF THE STRUCTURE. ALL NECESSARY PRECAUTIONS MUST BE TAKEN TO ENSURE THE STRUCTURAL INTEGRITY, INCLUDING, BUT NOT LIMITED TO, ENGINEERING ASSESSMENT OF CONSTRUCTION STRESSES WITH INSTALLATION MAXIMUM WIND SPEED AND/OR TEMPORARY BRACING AND SHORING.
14. DO NOT SCALE DRAWINGS.
15. MODIFICATION WORK SHALL BE COMPLETED IN CALM WIND CONDITIONS / OR APPROPRIATE WIND SPEED FOR THE TYPE OF MODIFICATION WORK TO BE INSTALLED.
16. THE CLIMBING FACILITIES, SAFETY CLIMB, AND ALL PARTS THEREOF SHALL NOT BE IMPEDED, MODIFIED, OR ALTERED WITHOUT THE EXPRESS WRITTEN APPROVAL. ALL ALTERATIONS TO A SAFETY CLIMB'S ORIGINAL MANUFACTURER'S CONFIGURATION MUST BE DESIGNED BY THE ENGINEER OF RECORD. IF THE GENERAL CONTRACTOR FINDS THAT THE CLIMBING FACILITIES ARE IMPEDED, EITHER DURING BIDDING, DURING PRE-FABRICATION MAPPING, OR WHILE ON-SITE, THE GENERAL CONTRACTOR SHALL CONTACT THE MASTEC POC TO DETERMINE A METHOD OF RESOLUTION.
17. ANY WORK PERFORMED WITHOUT A PREFABRICATION MAPPING IS DONE AT THE RISK OF THE GENERAL CONTRACTOR AND/OR FABRICATOR.
18. AT THE TIME OF NTP, THE CONTRACTOR IS RESPONSIBLE FOR ENGAGING A MODIFICATION INSPECTOR TO COORDINATE AN INSPECTION SCHEDULE AND ENSURE PROPER DOCUMENTATION IS MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT. FOUNDATION WORK REQUIRES INSPECTION PRIOR TO POURING CONCRETE. SHOP DRAWINGS ARE TO BE SUBMITTED TO THE EOR PRIOR TO FABRICATION.
19. IF, DURING THE COURSE OF A FOUNDATION MODIFICATION, THE GC ENCOUNTERS EXISTING CONDUIT LOCATED WITHIN THE CONFINES OF THE EXISTING OR PROPOSED FOUNDATION CONCRETE, AND THIS CONDUIT IS NOT IN A LOCATION THAT IS SPECIFIED WITHIN THESE DESIGN DRAWINGS, THE GC SHALL IMMEDIATELY CONTACT THE EOR FOR GUIDANCE BEFORE PROCEEDING WITH THE INSTALLATION OF THE PROPOSED FOUNDATION MODIFICATION. IF CONDUIT IS TO BE INSTALLED THROUGH THE EXISTING FOUNDATION OR PROPOSED FOUNDATION MODIFICATION AND HASN'T BEEN SPECIFIED WITHIN THESE DESIGN DRAWINGS THEN THE GC SHALL IMMEDIATELY CONTACT THE EOR FOR GUIDANCE PRIOR TO PROCEEDING WITH THE INSTALLATION OF THE PROPOSED FOUNDATION MODIFICATIONS.

1. DESIGN, FABRICATION, ERECTION, ALTERATION, AND MAINTENANCE SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED OTHERWISE (UNO):

- A. TIA-222: STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.
- B. TIA-322: LOADING, ANALYSIS, AND DESIGN CRITERIA RELATED TO THE INSTALLATION, ALTERATION AND MAINTENANCE OF COMMUNICATION STRUCTURES.
- C. AISC: MANUAL OF STEEL CONSTRUCTION

2. ALL STRUCTURAL STEEL IS TO BE NEW AND CONFORM TO THE FOLLOWING:

- A. WIDE FLANGE SHAPE                      ASTM A992, FY 50 KSI
- B. OTHER SHAPE , PLATES AND ROD      ASTM A36, FY 36KSI
- C. PIPE COLUMNS                          ASTM A53, FY 35 KSI
- D. STRUCTURAL TUBING                    ASTM A500, FY 46 KSI
- E. ANCHOR BOLTS                          ASTM A307
- F. CONNECTION BOLTS                    ASTM A325

3. ALL BOLTS SHALL BE HOT-DIP GALVANIZED ASTM A325 ASSEMBLIES, TO INCLUDE BOLT, ASTM A563 HEAVY HEX NUT, F436 FLAT WASHER, AND SPLIT LOCK WASHER, UNO. BOLT THREADS ARE TO BE EXCLUDED FROM THE SHEAR PLANES. USE BEARING TYPE CONNECTIONS. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.

4. ALL FASTENERS SHALL NOT BE REUSED.

5. DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.

6. ALL EXPOSED EXTERIOR STRUCTURAL STEEL (INCLUDING BOLTS, LOCK WASHERS, PINS, ETC.) SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A153 AND A123. FOR ALL FABRICATED WELDED ASSEMBLIES TO BE HOT-DIP GALVANIZED, PROVIDE WELDS ALL AROUND OR ADD SEAL WELDS WHERE STRUCTURAL WELDS ARE NOT SPECIFIED. FOR HIGH STRENGTH STEEL FASTENERS WHERE HOT-DIP GALVANIZATION IS NOT PERMITTED, MAGNI 565 COATING SHALL BE USED. ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING TOWER STEEL.

7. WHERE SPECIFIED, THE SEALANT BETWEEN STEEL COMPONENTS IS TO BE SILICONE CAULKING THAT IS EXTERIOR GRADE, ABLE TO BE PAINTED, AND ACCEPTABLE TO THE ENGINEER OF RECORD.

8. ALL EXPOSED STRUCTURAL STEEL AS THE RESULT OF THIS SCOPE OF WORK INCLUDING WELDS, FIELD DRILLED HOLES, AND SHAFT INTERIORS (WHERE ACCESSIBLE), SHALL BE CLEANED AND COLD GALVANIZING APPLIED BY BRUSH. PHOTO DOCUMENTATION IS REQUIRED TO BE SUBMITTED TO THE MI INSPECTOR.

9. NO WELDING, TORCH CUTTING, OR OPEN FLAME IS PERMITTED ON THIS CONSTRUCTION SITE UNLESS DIRECTLY SPECIFIED IN THE DRAWINGS.


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| 1   | 07/23/21 | REVISED DRAWINGS |  | JMB |   |                |
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| REVISIONS   |          |                  |  |     | <div>SITE NAME: KINGSGATE</div> <div>SITE NUMBER: SB29</div> <div>FA NUMBER: 10092407</div> <div>MNS ENG. NUMBER: 21545 - MOD3</div> <div>SITE ADDRESS:<br/>14326 124TH AVE NE<br/>KIRKLAND, WA 98034</div> |                |
| <div><div><div><div><div>RAPHAEL MOHAMED</div><div>STATE OF WASHINGTON</div><div><div><div></div><div>42214</div><div>REGISTERED</div><div>PROFESSIONAL ENGINEER</div></div></div></div><div><div><div></div><div>Kapil</div></div></div></div></div></div> |          |                  |  |     |   |                |
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| <div>NOTES</div>  |          |                  |  |     | <div>N-2</div>  | <div>REV</div> |
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CITY OF KIRKLAND  
REVIEWED BY TCHAN  
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1. ALL WELDING SHALL BE CARRIED OUT UNDER GOOD OPERATOR CONDITIONS AS DEFINED IN SECTION 5.12 OF AWS D1.1.
2. ALL ARC WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.1 (LATEST EDITION). THIS SHALL INCLUDE A CERTIFIED WELDING INSPECTOR (CWI) FOR ACCEPTANCE OR REJECTION OF ALL WELDING OPERATIONS, PRE-DURING-POST, USING THE ACCEPTANCE CRITERIA OF AWS D1.1. THE CWI SHALL WORK WITH THE GC ON THE LEVEL OF INTERACTION NEEDED TO CONDUCT THE WELDING INSPECTION. THE CERTIFIED WELDING INSPECTION IS THE RESPONSIBILITY OF THE GC.
3. THE CWI SHALL INDICATE, IN A WRITTEN WELDING REPORT, THAT ALL WELDING OPERATIONS, PRE-DURING-POST, WERE CONDUCTED IN ACCORDANCE WITH AWS D1.1 INCLUDING PHOTOGRAPHS AND DOCUMENTATION SUPPORTING THE ACCEPTANCE OR REJECTION OF ALL WELDING. ALL CWI WELDING INSPECTION DOCUMENTATION AND PHOTOS SHALL BE SUBMITTED TO THE MI INSPECTOR.
4. FOR ALL WELDING, USE E 70 XX ELECTRODES, UNO.
5. SURFACES TO BE WELDED SHALL BE FREE FROM SCALE, SLAG, RUST, MOISTURE, GREASE OR ANY OTHER FOREIGN MATERIAL THAT WOULD PREVENT PROPER WELDING. GRIND THE SURFACE ADJACENT TO THE WELD FOR A DISTANCE OF 2" MINIMUM ALL AROUND. ENSURE BOTH AREAS ARE 100% FREE OF ALL GALVANIZING.
6. DO NOT WELD IF THE TEMPERATURE OF THE STEEL IN THE VICINITY OF THE WELD AREA IS BELOW 0°F. WHEN THE TEMPERATURE IS BETWEEN 0°F AND 32°F, PREHEAT AND MAINTAIN THE STEEL IN THE VICINITY OF THE WELD AREA AT 70°F DURING THE WELDING PROCESS.
7. DO NOT WELD ON WET OR FROST-COVERED SURFACES AND PROVIDE ADEQUATE PROTECTION FROM HIGH WINDS.
8. FIELD NDE MINIMUM REQUIREMENTS:
  - A. ALL NDE SHALL BE IN ACCORDANCE WITH AWS D1.1.
  - B. FOR NEW BASE STIFFENERS (INCLUSIVE OF TRANSITION STIFFENERS) AND ANCHOR ROD BRACKETS, COMPLETE JOINT PENETRATION WELDS SHALL BE 100% INSPECTED BY UT. ALL PARTIAL JOINT PENETRATION AND FILLET WELDS SHALL BE 100% INSPECTED BY MT.
  - C. FOR NEW FLAT PLATE REINFORCEMENT AT THE BASE OF THE TOWER, COMPLETE JOINT PENETRATION WELDS SHALL BE 100% INSPECTED BY UT. ALL PARTIAL JOINT PENETRATION AND FILLET WELDS SHALL BE 100% INSPECTED BY MT, BUT MAY BE LIMITED TO A HEIGHT OF 10'-0".
  - D. FOR NDE OF THE EXISTING BASE PLATE CIRCUMFERENTIAL WELD, GC SHALL REFERENCE THE MI CHECKLIST FOR APPLICABILITY. NOTIFY THE EOR IMMEDIATELY IF ANY CRACKS ARE SUSPECTED OR HAVE BEEN IDENTIFIED. THE NDE SHALL INCLUDE ALL EXISTING MODIFICATIONS THAT HAVE BEEN WELDED TO THE BASE PLATE.
  - E. ALL TESTING LIMITATIONS SHALL BE DETAILED IN THE NDE REPORT.

Have either the special inspection report or the WABO fabrication shop certification available on site for the Building Inspector.

CITY OF KIRKLAND  
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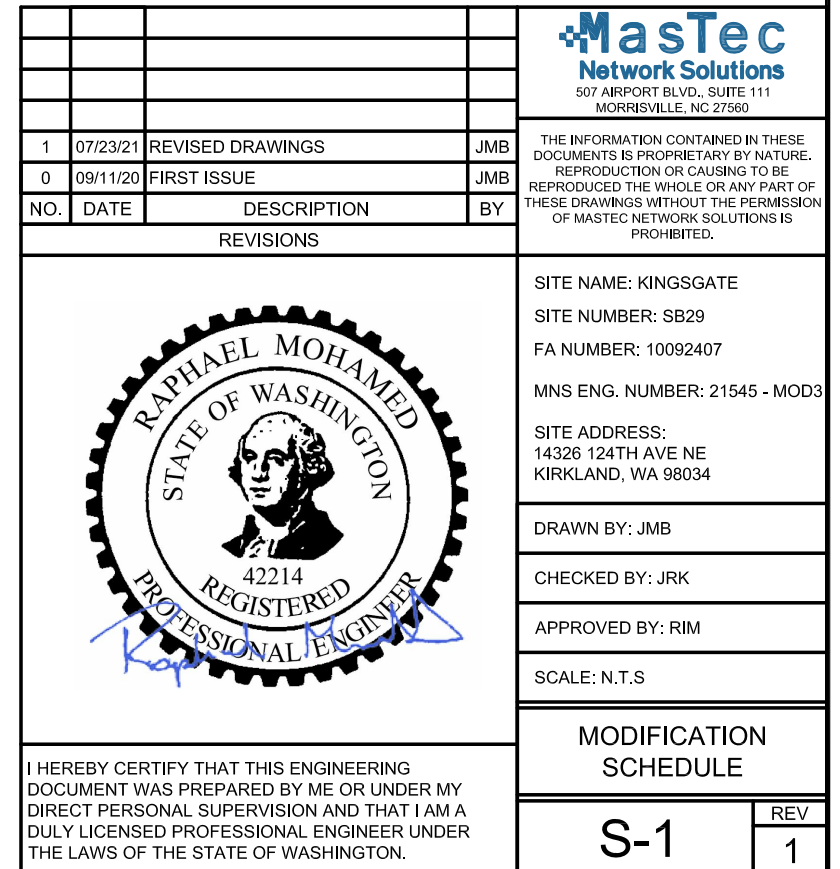
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| N-3   |          |                  |  |     | REV<br>1   |

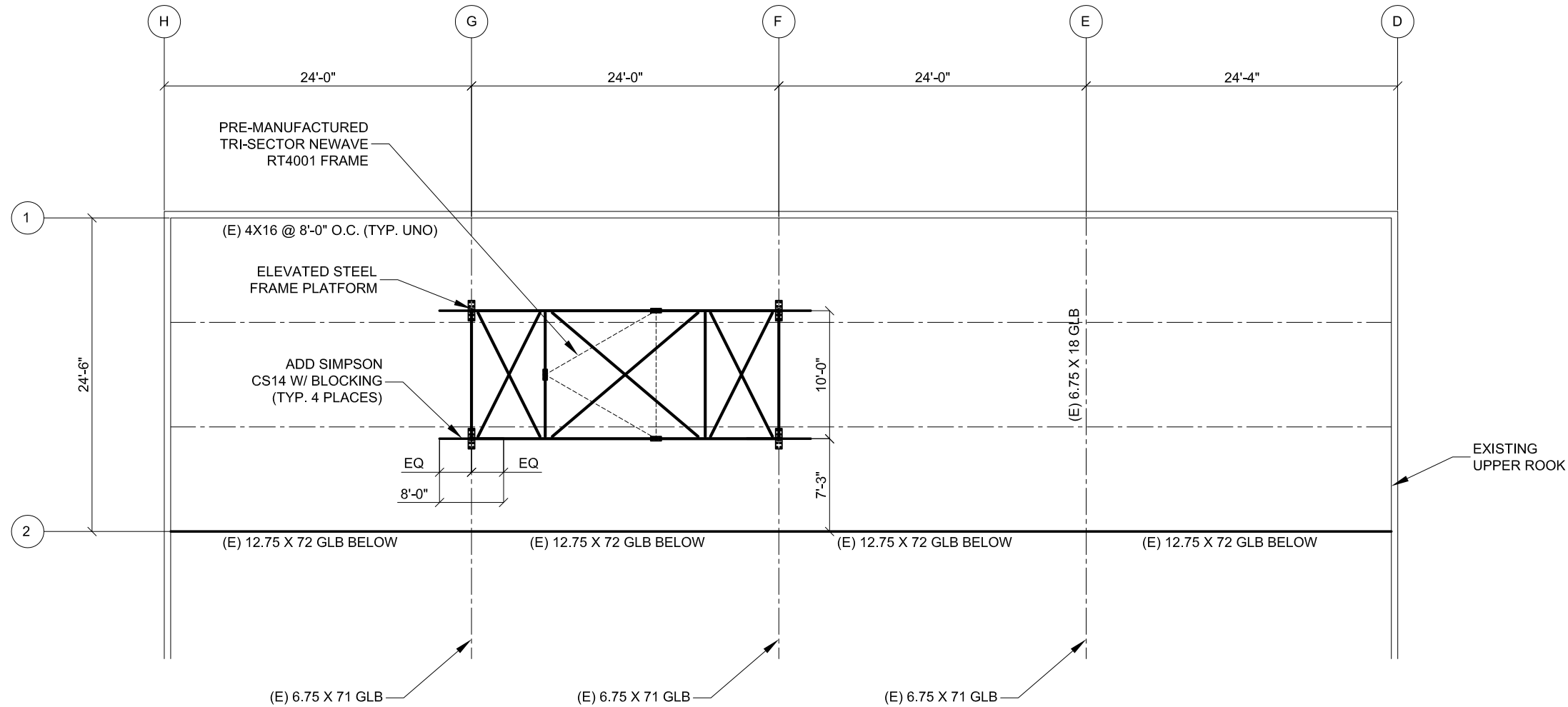


| MODIFICATION SCHEDULE |                                     |                  |               |            |
|-----------------------|-------------------------------------|------------------|---------------|------------|
| SCOPE NO.             | MODIFICATION DESCRIPTION            | BOTTOM ELEVATION | TOP ELEVATION | SHEET NO.  |
| 1                     | REMOVE EXISTING BALLAST FRAMES      | -                | 31'-6" ±      | S-1 TO S-5 |
| 2                     | INSTALL BASE FRAMES                 | -                | 31'-6" ±      | S-1 TO S-5 |
| 3                     | INSTALL NEWAVE RT4001 ROOFTOP FRAME | -                | 31'-6" ±      | S-1 TO S-5 |
|                       |                                     | -                |               |            |
|                       |                                     |                  |               |            |
|                       |                                     |                  |               |            |

1. APPURTENANCES MAY INTERFERE WITH PROPOSED MODIFICATIONS.
2. ALL MODIFICATIONS TO BE INSTALLED CONTINUOUSLY THROUGH EXISTING EQUIPMENT. ALL EXISTING EQUIPMENT MUST NOT BE DAMAGED OR TAKEN OFF AIR DURING INSTALLATION OF PROPOSED MODIFICATIONS.
3. ANTENNA AND COAX NOT SHOWN FOR CLARITY. SEE STRUCTURAL ANALYSIS REPORT FOR EXISTING ANTENNA LOADING AND COAX CONFIGURATION.
4. PRIOR TO FABRICATION AND INSTALLATION , CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND QUANTITIES GIVEN. INFORMATION PROVIDED IS FOR QUOTING PURPOSES ONLY, AND SHALL NOT BE USED FOR FABRICATION.
5. EXISTING RRU'S AND ANCILLARY EQUIPMENT MAY NEED TO BE TEMPORARILY RELOCATED AS NECESSARY TO COMPLETE THIS MODIFICATION. EQUIPMENT IS NOT TO BE TAKEN OFF AIR AT ANY TIME DURING INSTALLATION. PLEASE CONTACT EOR IF THIS CANNOT BE MET.
6. CONTACT EOR IF PROPOSED MOUNT REINFORCEMENT DIMENSIONS CANNOT BE MET.

A 3D perspective view of the roof truss system. It shows a complex arrangement of steel beams and vertical supports. The main roof structure is a large rectangular frame with diagonal bracing. Numerous vertical columns support the roof. A callout '2' points to a vertical column at the bottom left, and a callout '3' points to a horizontal beam near the top center.







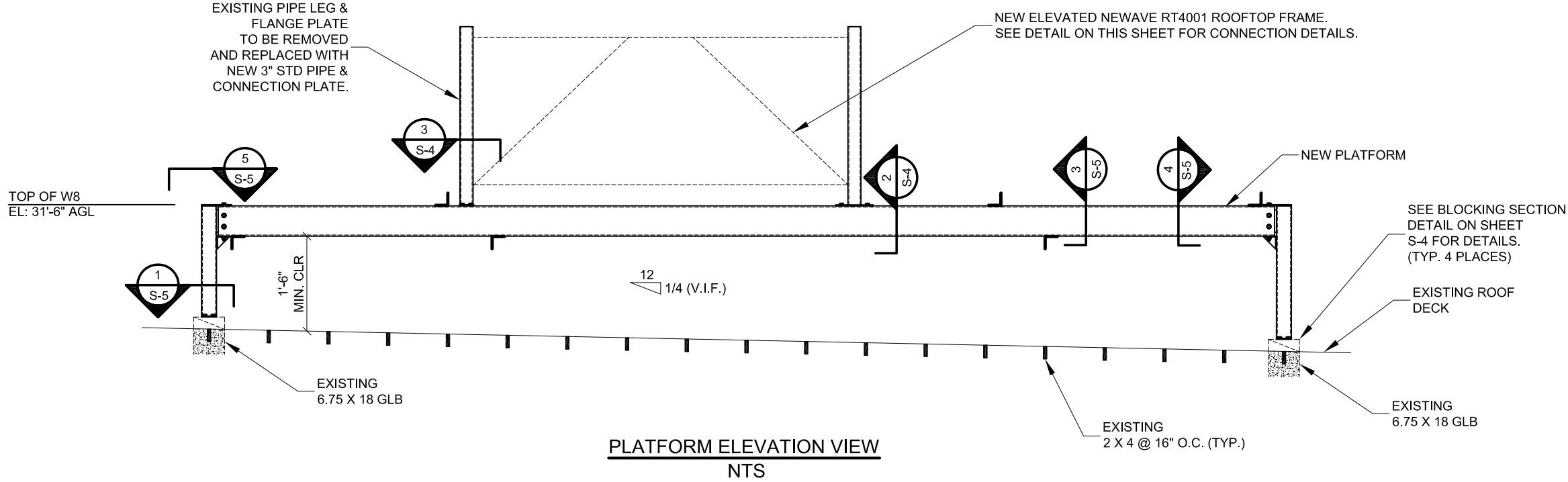
**ROOFTOP PLAN VIEW**  
NTS

| BILL OF MATERIAL |      |          |  |
|------------------|------|----------|--|
| ITEM             | P/N  | QUANTITY | DESCRIPTION  |
| 1                | P-1  | 3        | PIPE, 3.5 OD X 0.216 X 5'-6" (ASTM A53 GR. B)                |
| 2                | H-1  | 4        | PLATFORM LEGS, HSS 4 X 4 X 3/8" X 3'-0" (ASTM A500)          |
| 3                | W-1  | 2        | PLATFORM FRAMING, W8 X 15 X 23'-4" (ASTM A992)               |
| 4                | W-2  | 4        | PLATFORM GIRDERS, W8 X15 X 10'-0" (ASTM A992)                |
| 5                | A-1  | 2        | PLATFORM BRACE, L 3 1/2 X 3 1/2 X 1/4" X 11'-2" (ASTM A36)   |
| 6                | A-2  | 4        | PLATFORM BRACE, L 3 1/2 X 3 1/2 X 1/4" X 15'-5" (ASTM A36)   |
| 7                | BP-1 | 4        | PLATFORM BASE PLATE, PL 1/4" X 1'-7" X 6" (ASTM A36)         |
| 8                | CP-1 | 3        | ROOFTOP FRAME BASE PLATE, PL 1/4" X 4" X 10" (ASTM A36)      |
| 9                | PL-1 | 4        | CAP PLATE, PL 1/4" X 8" X 8" (ASTM A36)                      |
| 10               | SA-1 | 8        | SEAT ANGLES, L 3 1/2 X 3 1/2 X 5/16" X 4" (ASTM A36)         |
| 11               | S-1  | 8        | SEAT ANGLE STIFFENERS , PL 1/4" X 3 1/2" X 3 1/2" (ASTM A36) |
| 12               | GP-1 | 12       | GUSSET PLATES, PL 1/4" X 3 1/2" X 6" (ASTM A36)              |
| 13               | ---  | 32       | LAG SCREWS, 7/16"Ø (ASTM A307)                               |
| 14               | ---  | 68       | BOLT, 5/8"Ø W/ NUT- LKW EA. (ASTM A325)                      |

NOTES:  
1. ALL MATERIAL TO BE GALVANIZED  
2. MATERIALS FOR NEWAVE RT4001 ROOFTOP FRAME ARE NOT INCLUDED. REFER TO ASSEMBLY DRAWINGS FOR ADDITIONAL MEMBERS.

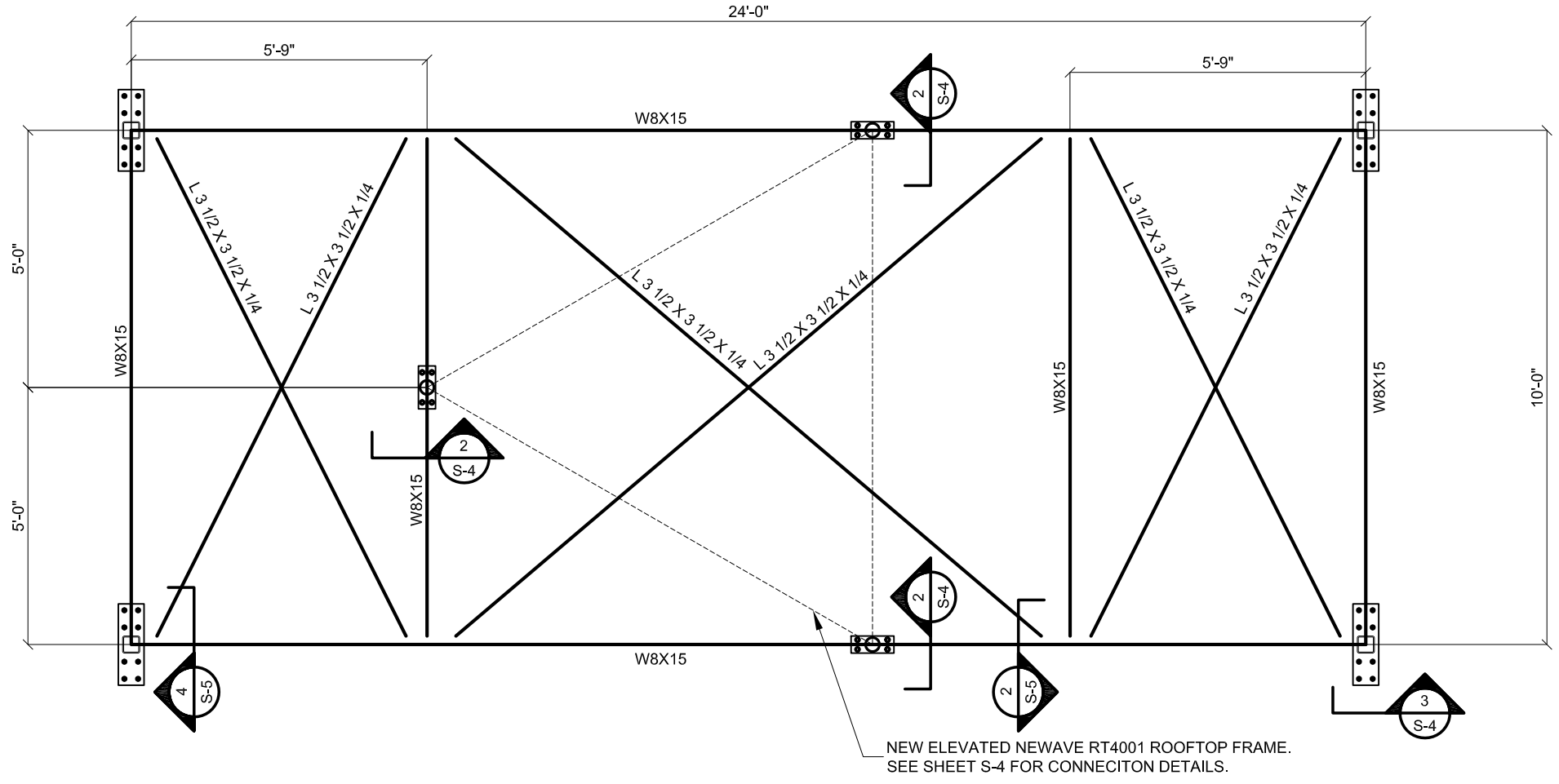
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|   |          |                  |     | S-2   |



NOTES:  
 1. CONSULT WITH BUILDING OWNER AND ORIGINAL WATERPROOFING CONTRACTOR PRIOR TO CONSTRUCTION IN ORDER TO ENSURE THE INSTALLATION METHOD WILL NOT VOID THE WATERPROOFING WARRANTY.  
 2. INSTALL APPROPRIATE WATERPROOFING TO ENSURE ALL CONNECTION POINTS TO THE ROOF ARE WATER TIGHT.  
 3. ALL LEAD HOLES FOR LAG SCREWS SHALL BE BORED TO AVOID SPLITTING OF WOOD MEMBER DURING CONSTRUCTION. LEAD HOLES SHALL HAVE A DIAMETER EQUAL TO 50% OF THE SHANK DIAMETER. LENGTH OF THE LEAD HOLES SHALL BE EQUAL TO AT



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 08/11/2021

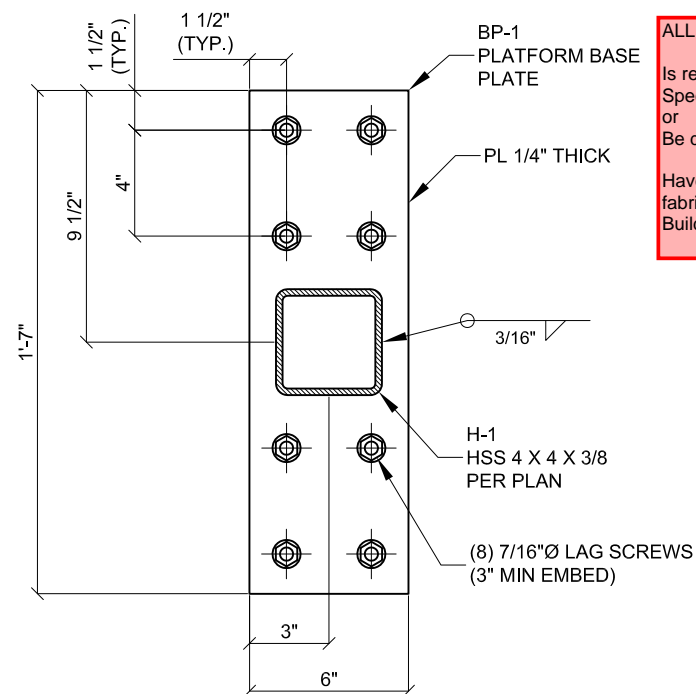


| <p>507 AIRPORT BLVD., SUITE 111<br/>MORRISVILLE, NC 27560</p>   |          |                  |                 |
|---|----------|------------------|-----------------|
| 1   | 07/23/21 | REVISED DRAWINGS | JMB             |
| 0   | 09/11/20 | FIRST ISSUE      | JMB             |
| NO.   | DATE     | DESCRIPTION      | BY              |
| REVISIONS   |          |                  |                 |
|   |          |                  |                 |
| I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WASHINGTON. |          |                  |                 |
| SITE NAME: KINGSGATE<br>SITE NUMBER: SB29<br>FA NUMBER: 10092407<br>MNS ENG. NUMBER: 21545 - MOD3<br>SITE ADDRESS:<br>14326 124TH AVE NE<br>KIRKLAND, WA 98034  |          |                  |                 |
| DRAWN BY: JMB   |          |                  |                 |
| CHECKED BY: JRK   |          |                  |                 |
| APPROVED BY: RIM  |          |                  |                 |
| SCALE: N.T.S  |          |                  |                 |
| <b>PLATFORM FRAMING PLAN</b>  |          |                  |                 |
| <b>S-3</b>  |          |                  | REV<br><b>1</b> |

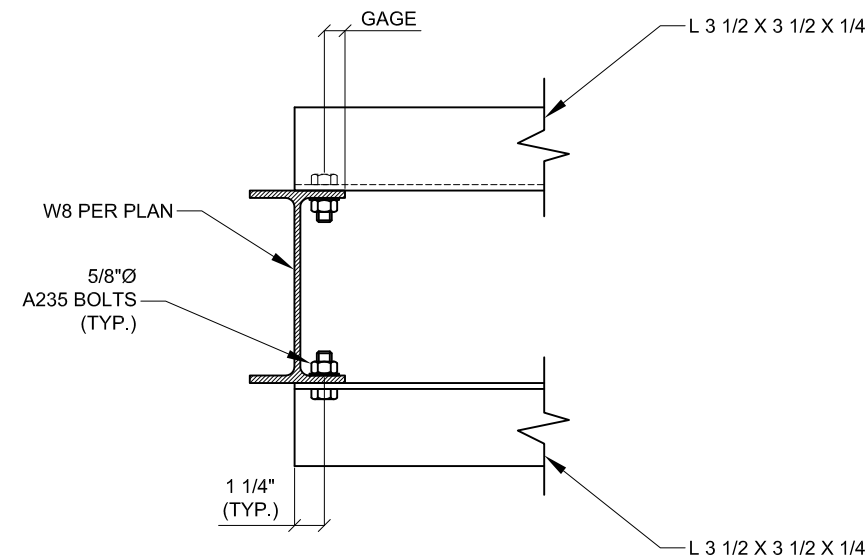
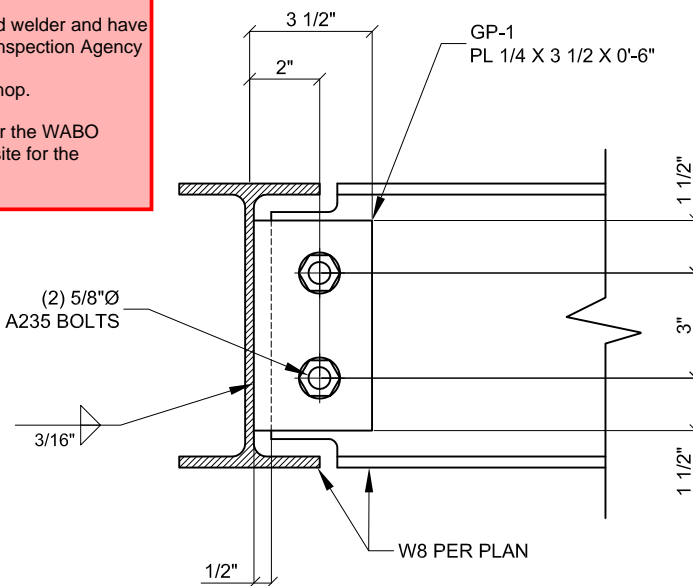




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|---|----------|------------------|--|-----|---|
|   |          |                  |  |     | <br><b>Mastec</b><br><b>Network Solutions</b><br>507 AIRPORT BLVD., SUITE 111<br>MORRISVILLE, NC 27560 |
|   |          |                  |  |     |   |
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| NO.   | DATE     | DESCRIPTION      |  | BY  |   |
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|    |          |                  |  |     | SITE NAME: KINGSGATE<br>SITE NUMBER: SB29<br>FA NUMBER: 10092407<br>MNS ENG. NUMBER: 21545 - MOD  |
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|   |          |                  |  |     | SCALE: N.T.S  |
| PLATFORM ELEVATION VIEW   |          |                  |  |     | S-4   |
|   |          |                  |  |     | REV<br>1  |



ALL Welding:  
Is required to be done by a WABO certified welder and have Special Inspections by a WABO certified Inspection Agency or Be done in a WABO certified fabrication shop.  
Have either the special inspection report or the WABO fabrication shop certification available on site for the Building Inspector.

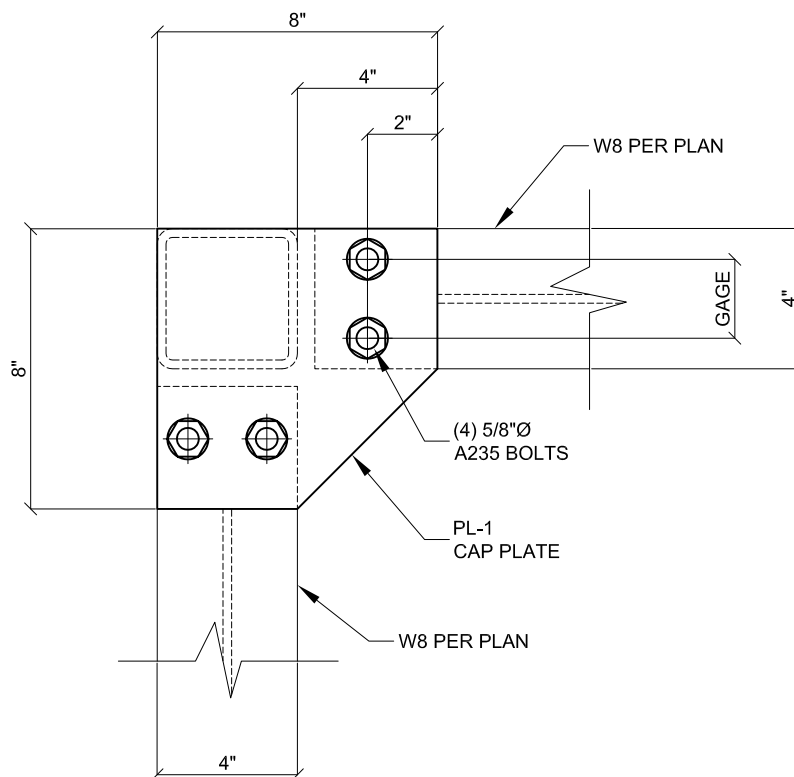
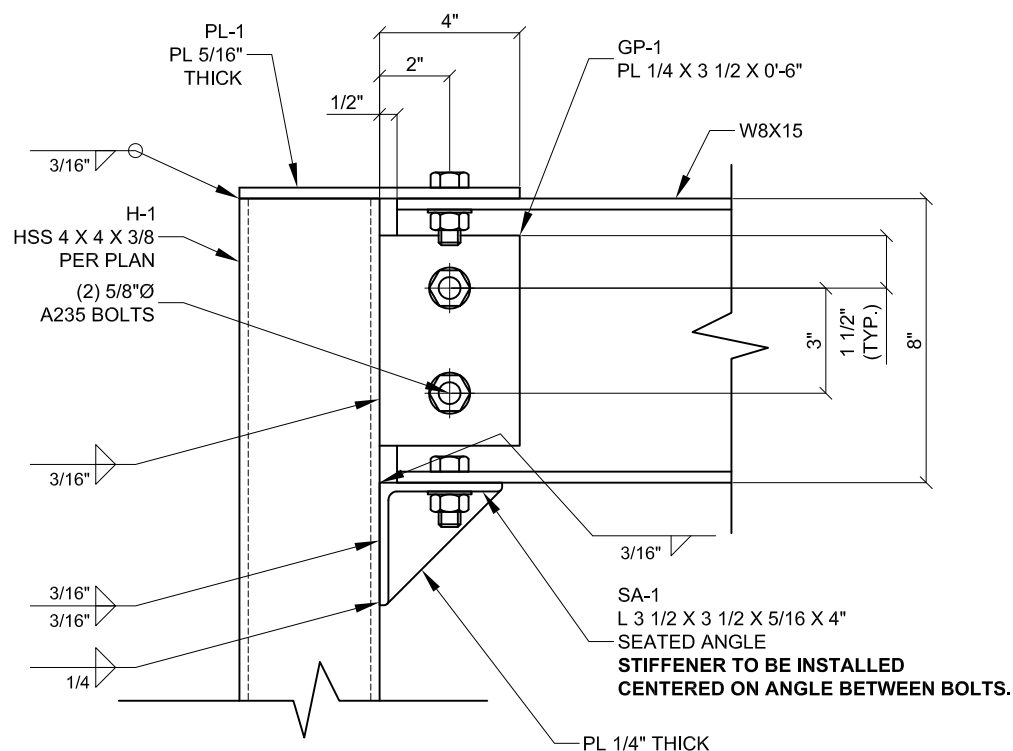


1  
S-5 PLATFORM CONNECTION DETAILS  
(TYPICAL)

2  
S-5 MID-SPAN CONNECTION DETAILS  
(TYPICAL)

3  
S-5 BRACING CONNECTION DETAILS  
(TYPICAL)

CITY OF KIRKLAND  
REVIEWED BY TCHAN  
08/11/2021

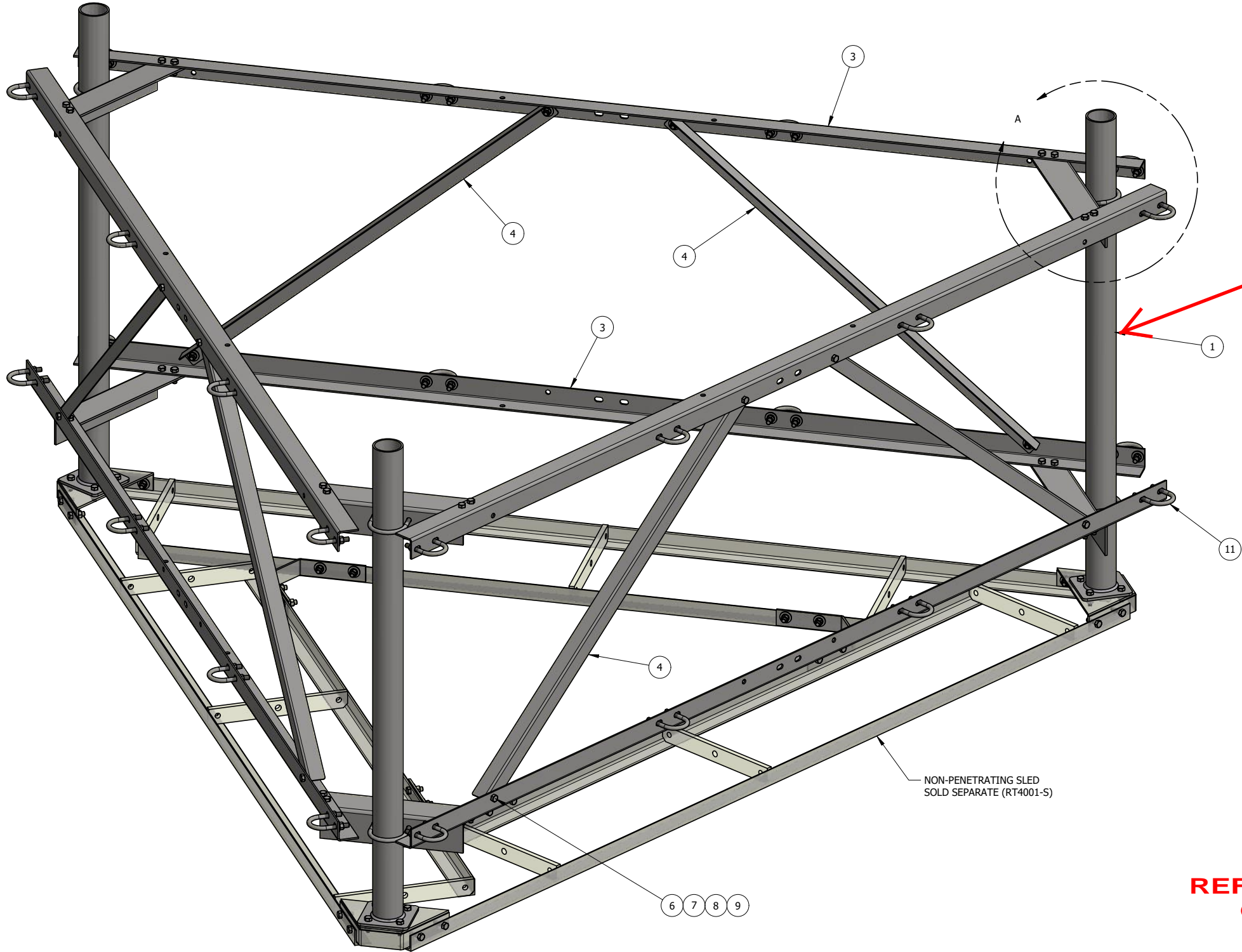


4  
S-5 W8 FRAME CONNECTION DETAILS  
(TYPICAL)

5  
S-5 W8 FRAME TOP PLATE CONNECTION DETAILS  
(TYPICAL)

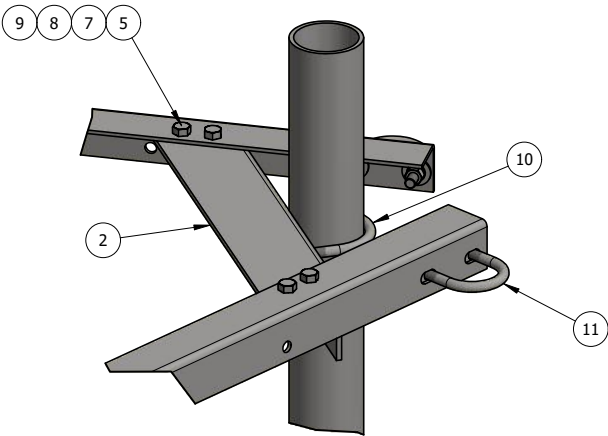
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|---|----------|------------------|-----|--|--|
|   |          |                  |     |  | <div><div><div>MasTec</div><div>Network Solutions</div><div>507 AIRPORT BLVD., SUITE 111<br/>MORRISVILLE, NC 27560</div></div><div>THE INFORMATION CONTAINED IN THESE DOCUMENTS IS PROPRIETARY BY NATURE. REPRODUCTION OR CAUSING TO BE REPRODUCED THE WHOLE OR ANY PART OF THESE DRAWINGS WITHOUT THE PERMISSION OF MASTEC NETWORK SOLUTIONS IS PROHIBITED.</div></div> |
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| 1   | 07/23/21 | REVISED DRAWINGS | JMB |  |  |
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| NO.   | DATE     | DESCRIPTION      | BY  |  |  |
| REVISIONS   |          |                  |     |  |  |
| <div><div><div><div><div><div></div><div>RAPHAEL MOHAMED</div><div>STATE OF WASHINGTON</div><div><div><div></div><div>42214</div><div>REGISTERED</div><div>PROFESSIONAL ENGINEER</div></div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><d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| ITEM | PART #      | DESCRIPTION                                   | QTY |
|------|-------------|---|-----|
| 1    | RT4001.01   | 3-SECTOR ROOFTOP FRAME PIPE COLUMN            | 3   |
| 2    | RT4001.04   | 3-SECTOR ROOFTOP FRAME CORNOR BRACE ANGLE     | 6   |
| 3    | RT4001.05   | 3-SECTOR ROOFTOP HORIZONTAL FACE ANGLE MEMBER | 6   |
| 4    | RT4001.06   | 3-SECTOR ROOFTOP FRAME BRACE ANGLE            | 6   |
| 5    | 27-4301-005 | 1/2" x 1 1/2" GR.5 HDG BOLT                   | 36  |
| 6    | 27-4300-005 | 1/2" x 1 1/4" GR.5 HDG BOLT                   | 12  |
| 7    | 27-5200-005 | 1/2" A36 HDG FLAT WASHER                      | 36  |
| 8    | 27-5210-005 | 1/2" HDG LOCK WASHER                          | 48  |
| 9    | 27-5222-005 | 1/2" HDG HEX NUT                              | 48  |
| 10   | 27-6090-005 | GALV. 1/2" x 3 5/8" x 5" U-BOLT ASSEMBLY      | 6   |
| 11   | 27-6060-005 | GALV. 1/2" x 2-1/2" x 4" GR-5 U-BOLT ASSEMBLY | 24  |



NEWAVE PART #RT4001.01 TO  
BE REPLACED WITH NEW  
CUSTOM PIPE ASSEMBLY

CITY OF KIRKLAND  
REVIEWED BY TCHAN  
08/11/2021



DETAIL - A

FOR  
REFERENCE  
ONLY

|      |
|------|
| QTY: |
| CHK: |

|   |   |   |                                 |                        |  |                                     |
|---|---|---|---------------------------------|------------------------|--|-------------------------------------|
| <b>STANDARD TOLERANCES:</b><br>(UNLESS OTHERWISE NOTED)<br>FRACTIONS ±1/16"<br>1 DECIMAL ±.1"<br>2 DECIMAL ±.03"<br>3 DECIMAL ±.005"<br>ANGLES ±.5° | THIS DESIGN AND INFORMATION<br>CONTAINED ON THIS PRINT IS THE<br>PROPERTY OF NEWAVE TOWER<br>COMPONENTS LLC. ANY<br>REPRODUCTION, DUPLICATION OR<br>TRANSFER OF THE PROPRIETARY CONTENT<br>IS PROHIBITED WITHOUT<br>WRITTEN PERMISSION. | <br><b>NEWAVE</b><br>TOWER COMPONENTS, 503-792-3739<br>10910 PORTLAND RD. BROOKS, OR 97305 | MATERIAL:<br><b>SEE DETAILS</b> |                        | TITLE:<br><b>3-SECTOR ROOFTOP FRAME<br/>WITH 10'-6" FACE</b> |                                     |
|   |   |   | GRADE:<br><b>SEE DETAILS</b>    | DRAWN BY:<br><b>JG</b> | SERIES:<br>ROOFTOP/WALLMOUNT                                 |                                     |
|   |   |   | FINISH:<br><b>HDG</b>           | CHECKED BY:            | DATE:<br><b>10/29/2013</b>                                   | PART WT (BARE):<br><b>439.15 LB</b> |
|   |   |   |                                 |                        | DRAWING NO.<br><b>RT4001</b>                                 |                                     |